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REPORTS

FROM

COMMISSIONERS, INSPECTORS,

AND OTHERS:

THIRTY-FIVE VOLUMES.

— (6.) —

FACTORIES AND WORKSHOPS;
INEBRIATES; LAUNDRIES.

Session
12 *March* 1894 —— 25 *August* 1894.

VOL. XXI.

BIBL. LONDIN. UNIV.

1894.

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THIRTY-FIVE VOLUMES:—CONTENTS OF THE

SIXTH VOLUME.

N.B.—*THE* Figures *at the* beginning of the line, *correspond with the* N° *at the foot of each* Report; *and the* Figures *at the* end of the line, *refer to the* MS. Paging *of the Volumes arranged for The House of Commons.*

FACTORIES AND WORKSHOPS:

[c. 7368.] Report of the Chief Inspector of Factories and Workshops for the year 1893. p. 1

INEBRIATES ACTS, 1879 AND 1888:

[c. 7519.] Fourteenth Report of the Inspector of Retreats under the Inebriates Acts, 1879 and 1888, for the year 1893, with Appendix. 695

LAUNDRIES:

[c. 7418.] Report of Her Majesty's Inspectors of Factories as to Hours of Work, Dangerous Machinery, and Sanitary Condition of Laundries. 709

REPORT

OF THE

CHIEF INSPECTOR OF FACTORIES AND WORKSHOPS

TO

HER MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT,

FOR THE

YEAR 1893.

Presented to both Houses of Parliament by Command of Her Majesty.

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1894.

[C.—7368.]

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REPORT of R. E. SPRAGUE ORAM, Esq., H.M. Chief Inspector of Factories, for the year 1893.

Home Office,
January 1894.

SIR,

THE Factory department this year has exemplified the truth of Mr. Gladstone's remarks some years since, when he observed, in speaking of public measures, that "progressive " change and adaptation to the various circumstances of different " periods is an essential law. There is a desire for continued " and progressive improvement; after examination by a free press, " free assemblies, and the free conversation of the country, they " reach a condition of maturity, in which the legislature may " safely and wisely adopt them, a tardy process, and ardent spirits " receive lessons of patience, but when they once take their place " on the Statute book of the country, they become part of the " system under which we live.

"There is no backward road, no footsteps turned in the direction " of retrogression.

"Onwards is the motto of Englishmen, and by that motto they " abide."

In Factory legislation there has been steady progress, and whilst Royal Commissions and Trades Congresses have commended what has been accomplished, and the mode of administration of the Factory Acts, they have always pointed to further reforms. Bills have been passed which could not have been introduced had not manufacturers, who were formerly opponents of such legislation, been convinced of its benefits by the results, and had not the general public gradually been brought to feel the truth of Mr. Goschen's remark, that "you may *not* do what you like with " your own. It is maltreating your child if you send him to " work instead of to school, and if either because you could not " make a sacrifice or from utter carelessness you destroyed the " child's future."

This year has witnessed a considerable march on the onward progress, and as will be seen in the following pages much valuable information has been obtained by the exhaustive inquiries of the Departmental Committees you have appointed. It may be reasonably hoped that the carrying out of their recommendations will be of great and permanent benefit to the nation, and dealing as they have done with dangerous trades, will lead to a decrease in the rate of mortality in the districts where the manufactures included in the various inquiries are carried on.

You became aware from inquiries you made, and from the accounts given in the newspapers of accidents and inquests, that in a number of industries in this country the workers were exposed to daily risks to their limbs, to their health, to their bodily condition, and even to their lives, which by the exercise of a little

care, forethought, and humanity, might be, and ought to be, prevented.

But you felt that before you could grapple with the matter effectually and successfully, you must have a thorough understanding of the peculiar conditions under which the business is carried on.

You accordingly selected four of the most important trades, and appointed committees to go about the country and visit the scene of the various industries concerned; taking evidence both of masters and men; and seeing with their own eyes what are the conditions under which the particular trades are being worked. As a result of the committees' labours, you have prepared special rules, which will very considerably mitigate the risks to which the workers in these industries are now liable, and will, I am confident, result in a considerable improvement in their well-being.

Few persons enjoying the comforts and conveniences which civilization provides for them are aware that the articles of clothing, utility, or ornament, which they possess, are in many instances purchased at a fearful cost in the deterioration, or even destruction within a brief period, of the health of those who are engaged in their manufacture.

Even where these evil effects are not so marked, there are often influences at work which are sapping the vital powers of the industrial population and stunting their growth.

This is a matter of national interest and importance, and I would here briefly refer to some of these injurious trades, of which fuller accounts will be found in the reports of the various Committees already referred to.

Trades dangerous from long hours and bad ventilation.

It seems evident from the reports of the inspectors that the confinement in close workrooms and the long hours of work allowed in milliners' and dressmakers' establishments, amounting sometimes to 14 hours daily on 5 days in the week, under the denomination of over-time, are injurious to the health of the work-people.

Considering that men are striving for, and in some cases obtaining, an 8 hours day, it seems not unreasonable that the case of the dressmakers, &c., who are often of a superior class and unable to obtain other employment, should be considered, and it may be borne in mind that in establishments connected with retail shops, they are often required to assist in serving in the shop after fulfilling their day's work under the Factory Act. This, it is true, is forbidden for young persons under 18 by the Shop Hours Act.

Sweating system in clothing trade.

The evils of the sweating system in the clothing trade, happily seem to be decreasing amongst the Gentile workers owing to the partial displacement of the middleman, but not so amongst the Jewish community.

The reduction of overtime for women and young persons would do much to bring about a more healthy state of things in the

whole trade, to which the increased efficiency of inspection has already contributed.

Manufactures dangerous on account of the materials used.

It is remarkable in what a number of manufactures lead, in some form or other, is useful or even essential. It takes its place in the most unlikely processes, *e.g.*, in the polishing of glass and glazing of china and earthenware.

Unfortunately, this metal is of a poisonous character. The symptoms of "plumbism" or lead poisoning are, anæmia, the appearance of a blue line on the gums round the teeth, "dropped wrist" or paralysis of the hand, &c.

Amongst females it is peculiarly injurious, producing in married women, premature confinement, and death of their offspring.

Some constitutions are more susceptible to its effects than others.

Young girls are especially so, the lead poisoning being suddenly developed, and causing headache, convulsions and unconsciousness; death often ensuing in three days, and in some cases of recovery from convulsions, total blindness remaining. White lead is very readily absorbed into the system, and both the manufacture and use of it are very dangerous.

It is to be regretted that though many substitutes have been tried, none as yet has been found which affords so good a pigment.

Orange, red, and yellow lead are also injurious. Some valuable suggestions have been brought forth by the Committees for minimizing their evil effects.

China and earthenware.

In potteries, the operatives are very subject to plumbism. The *glaze used for pottery is a vitreous compound to which lead is added in the process of grinding it to prepare it for use. It has been found possible by some firms to combine the lead with the vitreous glaze before grinding.

This has the happy effect of rendering the lead much less soluble and comparatively innocuous. It is considered by many practical men that this method of preparing glaze could be made of almost universal application.

The injurious conditions of the manufacture of earthenware commanded your attention, and the valuable report of the Committee shows the endeavours that have been made to alleviate the evils from lead incident to the manufacture.

Under your instructions, I have issued a circular to manufacturers, as recommended by the Committee, suggesting the advisability of experimenting with, and testing the use of glazes and colours in which all the lead has been "fritted," and their effect upon the health of the workpeople.

The ventilating apparatus invented by Mr. Turner, after a series of experiments, appears to have been very successful in the removal of dust, and the remarks on the subject in Appendix H. of the report of the Potteries Committee will repay perusal.

Enamelling of iron plates.

In the enamelling of iron plates lead is used. There is the same risk of lead poisoning as mentioned above. Some firms

* Or, as it is technically termed, "fritt."

allege that they use very little lead and that large quantities are used merely for the sake of a small saving of expense.

Chemical works.

In chemical works much mischief is wrought to the health of the operatives, the various gases causing tightness in the chest, and eventually serious injury to the lungs, even consumption; destruction of the septum between the nostrils, entire destruction of the teeth, injury to the eyes, &c., the arms too are kept in a chronic state of inflammation, being corroded by gas. Various workmen examined by the committee described their symptoms as follows:—"A tightness in the chest (this seems universal), a " feeling that you can hardly get your breath; difficulty of breath- " ing in the morning; a cough, causing a man to spit blood and to " drop down in the street as if dead, powerless and senseless; the " appetite entirely failing, obliging them to take stimulants, &c." In the manufacture of caustic soda, splashes of that material not unfrequently destroy the eye.

The manufacture of bleaching powder is especially injurious. A trade journal having sent down a special commissioner to St. Helen's in Lancashire to report on the nature of the work of chemical operatives, gives in an article under the head of "British Slaughter-Houses" the results of the investigation, which is very interesting and will be found in the more full report on chemical works.

Some most valuable suggestions have been made by the chemical committee for ameliorating their condition. Two patented machines have been lately invented, by which the work is done mechanically, the men not being brought into contact with the gas. Plans of the machines will be found in the chemical report.

There is also a process conducted in what are called "Deacon chambers," which are less injurious than those which are most commonly used and are described in the report of the chemical committee.

Lucifer matches.

It is satisfactory to have to state that, after full enquiry, only two cases of necrosis of the jaw seem to have occurred lately in lucifer match works. Additional precautions, however, have been directed by you to be observed in them.

Quarries.

Workmen in quarries are exposed to many dangers from having to work on ledges of rock at a great height, from falls of dislodged earth or stone, from the explosives used in blasting operations, and from hoisting apparatus and wagons as well as machinery.

The committee have framed useful rules for minimizing these dangers, and also mitigating the discomforts often attendant on the occupation of quarrymen, arising from their living at a distance from their work and their exposure to the inclemency of the weather.

Flax and linen factories.

The enquiry into the state of the linen trade, which was prompted by reports of its unhealthy character, has served to confirm those reports and has produced valuable results.

It came to light that an excessive amount of moisture, heat, and dust, and want of ventilation render the occupation such that its effects can only be withstood by the most robust constitutions.

Flax, the raw material from which this beautiful fabric is produced, seems an innocent material to the uninitiated; but in getting rid of the outer covering of the stems of the plant, which contain silica, and preparing its fibres, an incredible amount of dust is produced, which, finding its way into the respiratory organs, produces disease and premature death.

Boys are employed in this work and the effects on them is to produce violent paroxysms of coughing, being sometimes so violent as to oblige the sufferer to hold on by something (resembling in fact an aggravated attack of whooping cough). This well known symptom, in trade parlance, is described as being "poucey."

The late Dr. C. D. Purdon states that when these machine boys become "poucey," numbers of them leave the mills on account of suffering from chest diseases and go to other trades where they linger out a diseased existence or die from phthisis.

Dr. Alexander D'Evelyn, of Ballymena, says "all the hacklers "die young and all suffer from chronic disease of the lungs, "caused by the flax dust or 'pouce' as it is locally named . . "The first thing a hackler does each morning is to drink a "glass of raw whiskey to clear out his bronchial tubes, otherwise "he is unable to breathe."

In the carding rooms we have another preparatory stage in which the dust is so injurious that Dr. Whitaker of Belfast states: "If a girl gets a card at 18, her life is generally terminated at 30."

On the average, 16·8 years of work in this process kills, on the the same authority. Again, as regards the spinning and weaving processes, in which a certain degree of moisture is required and is obtained by infusion of steam, the atmosphere in some of the mills is described as containing moisture far beyond what is necessary.

In one instance given by Mr. J. Smith, of Dysart Mill, it was often such that he could not even see the girls working at the spinning frames.

In the weaving factories in Belfast generally, H.M. Inspector Osborn, whose valuable remarks are embodied in my report, states that the heat and moisture were excessive and unnecessary and that there was no proper ventilation.

It may be mentioned here that, on coming to work first, new hands invariably suffer from an affection called mill fever, which unfits them for work for about a week.

It is little wonder, therefore, that the workers, subjected to these debilitating conditions, and liable to dangerous variations of temperature, through going from these hot beds into the cold outer air, suffer much in health, and that diseases of the respiratory organs are very prevalent.

Although these various evils are so serious we are happily not without hopes of remedying them. First, as regards the dust, we have examples of successful efforts being made to deal with it both in Scotland and Ireland, by the use of fans, particulars of which will be found in Mr. Osborn's interesting report. And, secondly,

with respect to the heat and moisture, the experience gained in combating similar evils in the cotton trade leads me to think that a complete revolution may be confidently looked for in the flax industry also. In cotton weaving mills, since the introduction of the Cotton Cloth Factories Act, the moisture of the air is tested and recorded twice daily, no excess beyond what is necessary for the manufacture being permitted; and by means of fans the foul air is extracted from the rooms, which by these combined measures are rendered wholesome and agreeable.

It is to be hoped that the results will show, within a few years at most, a diminished death rate in all the districts where these industries prevail.

I will now proceed to give full details of the work accomplished during the last year.

I.—Staff.

i. *Female Inspectors.*

Being of opinion that the field for the employment of women, within the limits of their own special capacities and aptitudes, should be as wide and as large as you could possibly make it, and that there is no field in which they could be more usefully or fruitfully employed than in looking after the health and the industrial conditions under which their fellow women labour in the factories and workshops, you appointed two ladies as inspectors, whose labours have already been found most useful; the appointment of two others, with suitable qualifications, which has been determined upon, will, I believe, also be a great additional advantage to the department.

Their occupation will be to make special enquiries in the principal towns, acting as peripatetics, and not being attached to any fixed districts.

Miss Abraham has been actively employed not only in different parts of London, but also in Bristol, Leeds, Liverpool, Ipswich, Gloucester, Dublin, Belfast and Cork, conducting special enquiries, as well as visiting dressmakers, milliners and others. Her assistance has been most valuable, and where necessary she has given information to the local authorities. She reports as follows:—

"I have the honour to present my first annual report for the period extending from my appointment in May to the 31st of October.

"During the earlier portion of that time I was mainly engaged in the inspection of millinery, dressmaking, and tailoring workshops in London. I afterwards visited Ipswich, Bristol, Gloucester, Manchester, Liverpool, Leeds, Hull, Rothwell, Dublin, Cork, and Belfast upon a special enquiry into the laundry and lucifer match trades, and while engaged in this enquiry I also paid general visits of inspection in the district. The result of my enquiry into the laundry trade, in the course of which I visited several Irish convent laundries, is embodied in the

special report I made upon that subject, and my report to the Departmental Committee on lucifer match manufacture, of which I was subsequently appointed a member, contains the results of my visits to the match factories in England and Ireland.

"In the course of my visits, other than those of special enquiry, my attention has been called by the workers to the following matters of interest:—

"Legal overtime; illegal overtime in show rooms and bedrooms, and evasion of the law by sending work to the homes at the conclusion of the factory or workshop day; continuance of work on Saturday till 4 p.m.; the legal employment of women as shop assistants after the conclusion of their day's work in the workroom; inefficient ventilation; overcrowding in bedrooms attached to workshops; the absence of provision for escape from fire in workshops; the occurrence of accidents not reportable under the present law, but yet of a fairly serious nature; the complexity of the Abstract; infringement of the Truck Act, and the need for an Abstract of the Truck Act, which should be exhibited in factories and workshops.

Legal overtime.

"By dressmakers and milliners, the class of workers who have come most closely under my observation, legal overtime is almost universally condemned. A dressmaker's assistant, whose legal working day had for a considerable period lasted from 8 a.m. to 10 p.m., said to me in the presence of her fellow workers 'the overtime exception just spoils the Factory Act.' The chorus of approval with which her remark was endorsed was a clear indication of general discontent, and further experience showed that this had been but one expression of an almost universal feeling. The popularly supposed compensation of extra overtime payment seldom exists, and the young apprentice, improver, or assistant who spends 14 hours a day in workrooms, often ill-ventilated and overcrowded, finds it difficult to understand that her day has been allotted to her, not by a law-breaking employer, but in accordance with the provisions of a protecting Act.

"In factories where the payment is by piece-work, or in some districts, as in Dublin, where a stipulated sum is allowed for overtime, the weight of hostile opinion is not so pronounced; but even here, with the inducement of a supplementary wage, it is only the most unthinking of the workers who favour the system.

"Overtime allows but scanty opportunity for leisure, and for indoor workers it often means that but one day in the week is available for exercise or amusement. The consequent effect upon the health of the workers is exceedingly injurious, especially in the case of the indoor worker to whom I have referred, and who have been practically imprisoned for five days in the week and until the evening of the sixth.

"Some employers too, hold the opinion that in proportion as the workpeople suffer in health their work suffers in execution, and that in addition to this consideration has to be reckoned that of an extra expenditure in gas, which considerably weakens an already doubtful advantage. There exists also a large number of employers who make use of the overtime exception, not because of any special pressure, but because it is at hand, and yet another class who not using it at all would be unaffected by its withdrawal.

"I believe, therefore, that although a withdrawal of the overtime exception would meet with protest from employers who have developed its use from an exception into a principle, there are some who would welcome, and many who would be indifferent to such an amendment; that the large class of employers engaged in the textile and allied trades from whom permission to work overtime has been rigidly withheld,

would greet as a measure of justice its withdrawal now from trades, logically, no more entitled to the exception than their own; and that by the workers its abolition would be welcomed with feelings of the warmest gratitude.

"The exception granting permission to work overtime on 96 days in the year to trades in which perishable articles are employed, could, I believe, be replaced with advantage to the workers and without detriment to the employers by an arrangement of shifts similar in working to the regulation now in force under the French law.

Illegal overtime.

"Illegal overtime has been unquestionably diminished by the amendments in the Act of 1891, but these regulations, which have served as a check in some directions, have, in others, driven the more unscrupulous employers to adopt secret rather than open methods in the evasion of the law. The more perfect the means of detection the more necessary may it become for this class of employers to extend the methods by which detection can be best avoided, and inspection best obstructed. Therefore, wherever possible, bedrooms and showrooms are utilised either for purposes of concealment at the time of the inspector's visit, or as workrooms during the entire period of illegal working. I have received complaints of work continued under such circumstances until midnight, and even throughout the morning, which under the present law it is difficult to satisfactorily investigate. The showroom doors are locked, and it is explained by the person in charge that the keeper of the keys is absent, or it is objected that the suspected room is a bedroom, and that you cannot, therefore, legally claim the admission which is refused. It is, of course, possible to visit the workroom the following day and question the workers, but under a threat of dismissal they are naturally unwilling to disclose the conditions of their work, and it would be a doubtful kindness to compel them. In this connection I may mention that I received a letter from a dressmaker's apprentice, stating she had not dared to tell me the truth at the time of my visit, as she dreaded the treatment she would receive were it known to her employer that she had given a truthful account of her hours. The following letter which was sent to me by a lady from whom I had received much valuable information and help, I give as an instance of one of many similar cases which have come under my notice:—

" 'Dear Madam,

'Will you kindly inform me how far your powers extend as to 'visiting bedrooms in search of girls who may be at work, or secreted 'there, during illegal hours.

'My chief object in asking this is that during your visit to Messrs. '——— (subsequently they were fined) another girl than those you 'saw was secreted in the bedroom. Her name is Miss ———.

'Some time previous to your appointment an inspector called, and his 'visit proved futile, as all the girls were then in the bedroom.

" 'Yours faithfully, &c.,

———.'

"The firm referred to in this letter have since adopted the plan of sending home work to be finished after the conclusion of the legal period for overtime; other firms I learn are acting similarly, and the practice is a common one in the North of Ireland handkerchief and shirt factories.

Saturday work until 4 p.m.

"The continuance of work on Saturday until 4 p.m. has been mentioned to me as a question which is closely allied to that of overtime. The considerations involved are the same, and I believe there is a strong feeling among the workers in favour of a shorter day. They state that

even when working only the standard day of 8 a.m. to 8 p.m. they require more time for rest than is afforded by a half-holiday, which does not begin until 4 p.m. It is, perhaps, worthy of notice that under section 15 of the Act of 1891, permission to work eight hours on Saturday is regarded as a concession to employers to be granted only when the same number of hours have not been exceeded during the other days of the week. Work may be carried on under this section between 6 a.m. and 4 p.m., with two hours interval for meals, the total hours of actual work amounting to eight. Under section 42 of the Act of 1878, work may be continued from 8 a.m. to 4 p.m. with only half an hour's interval for meals, and without the compensating advantage of shorter hours during the week. It will therefore be seen that in the one case eight hours actual work on Saturday follows a total of 40 hours actual work during the week, and that in the second case 7½ hours actual work follows a total of 52½, or 60 hours during the week.

Employment of women as shop assistants at the conclusion of their day's work.

"I believe it would be beneficial to a large class of persons if the clause in the Shop Hours Regulation Act, prohibiting the employment in shops of young persons who had served a full day in a factory or workshop, were extended to include women. In cheap shops which remain open to a late hour it is a frequent practice, especially on Saturday, for the workers to serve in the shop at the conclusion of their day's work in the workroom. As women are exempt from the provisions of this Act, they are subjected to the strain of heavy hours consequent upon the dual system of employment which exists to a large degree throughout the country.

Inefficient ventilation.

"The majority of workshop owners I have visited appear to possess but a very elementary knowledge of ventilation and, with the exception of some provincial towns in which activity had been displayed, I could find little trace of instructions by the local authorities. I have been gravely assured that a door leading from one room into another, equally crowded, served the purposes of ventilation for both. Mechanical ventilation is almost unknown; the workers themselves object, and sometimes with justice, to the use of windows as ventilators, and the simplest contrivances for utilising the windows without creating a draught are neglected. The local authority has taken action in all cases to which I have been the means of attracting attention, but I found few instances in which there had been independent action.

Overcrowding in bedrooms.

"I have been enabled upon some occasions to obtain an improvement in the bedroom accommodation attached to workshops, but my success has been wholly due to the courtesy shown by employers in their readiness to confer with me upon the subject. I have received many complaints from indoor workers of overcrowded and sometimes neglected bedrooms, but it has not always been possible to interfere in a matter regarding which I am without powers. The good results, however, which I understand followed my intervention, where intervention had been possible, induce me to mention a subject which I trust may be considered in any future amendment of the Act.

Absence of fire-escapes in workshops.

"My attention has been frequently drawn to the need for the compulsory provision of fire-escapes in workshops above a certain height. In the event of a fire in a highly placed workshop, to which a fire-escape was not attached, the attendant loss of life would be probably serious, as space is seldom allowed in workshop buildings for any but an exceedingly narrow and awkward staircase. The extension of Clause 7 to include workshops would arm the workers with a sense of security it is now impossible they should feel.

Accidents not reportable, but fairly serious.

"I beg to submit as a point worthy of consideration, the extension of the accident clauses to certain classes of accidents, which are at present

non-reportable although sometimes of a serious nature. While visiting works in which bottling is carried on, I have noticed that accidents occur in the course of this process by which most frequently the hands, but sometimes the eyes and face are seriously cut. As, however, the bottling machine is not worked by mechanical power, the accidents, unless of a fatal nature, are not reportable under the present Act. I questioned one girl who had been absent from her employment for several weeks, and I have received complaints of other cases with which it was not in my power to deal.

Complexity of the Abstract.

"In the course of my visits I have found many workers ignorant of of the laws which exist for their protection, and their ignorance was not solely caused by the absence of the Abstract from the workroom walls, or its effectual concealment under many orders and patterns, but from their incapacity to take in its meaning. Their first difficulty seemed to me to lie in the language, which is perhaps not sufficiently simple or brief and follows too closely on the words of the Act, and their second lay in the introduction of matter which does not concern themselves. I believe that the substitution of a much simpler Abstract of the law, than that which at present exists, would lead to much greater aid being given to Her Majesty's Inspectors, than it is possible to expect from workers who are ignorant of the points upon which their information would be of value.

Truck Acts.

"From all parts of England and Ireland, I have received complaints of infringements, or supposed infringements, of the Truck Act. You sanctioned a prosecution in one case. I have in all other cases brought under my notice, secured the abandonment of the charges in the form of a deduction, but it has been impossible to do more; and charges continue to be made for light, steam power, material used in manufacture, &c., and fines continue to be imposed for damages, often in excess of the damage done, the difference being only a difference in the method of collection.

"I, therefore, bring the matter under your notice and I trust it will be found possible to frame an amendment to the Truck Acts which will prohibit certain charges, whether made in the form of deductions or as subsequent charges upon the wages. A suggestion has also been made to me by both workers and employers that it should be made compulsory to affix in factories and workshops a simple Abstract of the Truck Act."

Miss Paterson, who resides in Glasgow, has visited various towns in Scotland and the North of England, and has been engaged on special enquiries with respect to laundries, the lucifer match manufacture, creameries, the Truck Act, &c

Before his removal from Glasgow to London, Mr. Gould, Her Majesty's Superintending Inspector, wrote as follows:—

After reference to her visits in Glasgow and the suburbs, he remarks: "I then requested her to go through the principal "towns in Scotland, and to report to me on the observance of "the law as to the employment of women, female young persons, "and children in each district."

"She has also been engaged in an enquiry, as to the possibly injurious effects of the match industry on the health of those employed in it, and in this connection I am happy to be able to say, that at present no case of 'Necrosis,' has been traced to the source in question. At present, Miss Paterson is engaged in visiting the laundries in accordance with your circular, and she will prepare and forward to you an exhaustive report on the

hours worked in these establishments, and on the general condition of the industry. I may speak most highly of her work, which appears to be thorough and efficiently performed."

I have received the following report from Miss Paterson:—

"Since my appointment as factory inspector in May 1893, I have been employed in visiting factories and workshops in Scotland and the North of England, chiefly, however, in Glasgow and the West of Scotland. I have also made an inquiry into the conditions of work in laundries, and visited a number of dairy farms in Wigtownshire, and have sent special reports to you on these subjects.

"As the greater part of my work, so far, has been connected with dressmakers, tailoresses, milliners, &c., I wish to report only on matters connected with these trades, having had more opportunity of observing the conditions of work in them than in any others.

"The question of overtime has been much before me, and I venture to submit to you the conclusions I have arrived at on this subject, so far as I have been able to judge of it. Much of the necessity for overtime among dressmakers arises from want of method and forethought on the part of employers, forewomen, and customers, rather than from extreme pressure of business. The general hours of work for nine months of the year are not so long as permitted by the Factory Act, being most frequently from 9 a.m. until 7 p.m., consequently, the period of employment can be lengthened by two hours to meet the demands of the busy season, but as additional workers are usually employed at this time, the forewomen may not be able to make the most of the time at their disposal. Promises are made, no doubt, which without having recourse to overtime it is impossible to keep. Sometimes by the employer who, unwilling to risk losing an order, shuts his eyes to the fact that his workers have already more to do than they can well manage, sometimes by the forewoman who is anxious to turn out as much work per week as possible, and thinks she will manage it 'somehow,' and yet in many workrooms where the management is efficient, and the fact is accepted that an order must sometimes be refused, overtime is not required at all, and the employer apparently prospers.

"The following is a statement of employment, and applies to many dressmaking establishments here.

"During nine months of the year—

Monday, Tuesday, Wednesday, Thursday, Friday, } 9 a.m. to 7 p.m.; dinner hour, 1 to 2; no time for tea.

Saturday, 8 a.m. to 4 p.m.; dinner hour, 1 to 1.30.

"During three months of the year—

Monday, Tuesday and Wednesday, } 8 a.m. to 8 p.m.; dinner hour, 1 to 2; tea, 5 to 5.30.

Thursday and Friday, { 8 a.m. to 10 p.m.; dinner hour, 1 to 2; tea, 5 to 6.

Saturday, 8 a.m. to 4 p.m.; dinner, 1 to 1.30.

"It is not likely that the work done during these two hours of overtime, or on the days following overtime, will equal either in quantity or quality that done when the regular hours only are worked. Most of the employers with whom I have discussed the matter confirm my own impression that overtime working does not pay (that is, when the rate of wages is the same for overtime as for regular working hours), but

that it is so important not to disappoint a customer, that it has to be done. At present, I think, few women know much about the Factory Act, or its application to dressmaking, but I am sure there is nothing, beyond habit, in the nature of the trade to make overtime a necessity, and if women find out by one or two disappointments that a dress ordered, for instance, on Thursday, cannot be received finished on Saturday, they will soon find it possible to order it a little sooner. As for mournings, so often given as a reason for overtime, I believe there is a kind of unwritten law that all other work stands aside for mournings, and that might suffice. I was pleased to hear from one or two employers, that they worked no overtime because their workers would not do it, but I fear such cases are rare. I have been surprised to find, especially in the north of England, how large a number of apprentices are employed full time and also overtime. While these are not invariably very young girls, they are unaccustomed to sitting for long hours at what is probably the most trying to the constitution of all trades, and when one takes into consideration the impurity of the air in an average workroom where gas has been burning for some time, it is not surprising to see how anæmic and fragile many of them look, nor to be told, as I have been, that they would be better off without the Factory Act, which *compels* them to work these hours.

"The arguments against overtime seem to me to be—

"1st. That the work done during overtime is not equal, in amount or quality, to that done in regular hours.

"2nd. That the long hours of confinement are injurious to the health of the workers.

"3rd. That it would be an advantage to the workers and the trade generally, if dressmaking were less of a season trade, and the tendency at present, owing in part, at least, to the liberal allowance of overtime, is in the opposite direction.

"4th. That, owing to overtime work, girls of 13 may have to go home between 10 and 11 at night, often having two or more miles to walk.

"5th. That 10½ hours of actual work is quite a large enough proportion of a day to be devoted to earning a living.

"Against these there are only the stock arguments of weddings, mournings, and the thoughtlessness of customers.

"The shorter hours of employment on Saturday do not appear to be always such a boon to workers as they might be, and for this reason. Work on this day is usually carried on at high pressure, so many things having to be finished by 4 o'clock, and the half-hour allowed at dinner time is very seldom sufficient to permit of going home, consequently, tea is made and partaken of in the workroom, which is not vacated at all. I have been told by workers that they often felt as tired at 4 o'clock on Saturday as at eight on any other day, and it seems to be considered a grievance, not without reason, that, whereas, out of a period of employment of 12 hours one and a half hours are allowed for meals only half an hour is allowed out of a period of employment of eight hours' duration.

"I have received more verbal complaints from milliners, who are also shop assistants, than from any other class of workers, and have been sorry not to be able to do anything for them (when they were over 18 years of age), except by persuasion. No case has come before me in which a milliner had to be shop assistant during the hour allowed for meals under the Factory Act, but this might be insisted on by an employer at any time. It is, however, usual for her to have no half-holiday, and to be in the shop on Saturday night until 11 o'clock, or

later, if it is open, and this in addition to the full hours of work under the Factory Act, must try her powers of endurance pretty thoroughly. This is, of course, owing to the weakness of the Shop Hours Act, and I only mention it as being a keenly felt grievance.

"I have much pleasure in reporting that I have met almost uniform willingness on the part of employers to, at least, consider suggestions as to improved ventilation, &c., in workrooms, where I have thought that such improvements would add to the comfort of the workers. This does not apply to workrooms in private houses, which are often most unsuitable for the purpose, and in which it is very difficult to get any improvement made. I rarely find, in visiting such workrooms in meal hours, that the windows are opened, and overcrowding is much commoner in these than in any other class of workroom. The heating of workshops seems to require some attention. Many of these are too cold in winter, and in consequence the gas is lit for two or three hours in the morning for the sake of heat only, and the atmosphere vitiated, unnecessarily. In one town, especially, I found it very common to have a gas heating stove in the workroom, not connected in any way with any flue, and the workers apparently quite unconscious of the condition of the room. I called the attention of the medical officer to this practice, and have no doubt it will not be continued. The underground workrooms, so commonly occupied in Glasgow by tailors and milliners, I take this opportunity of protesting against. Into many of these daylight never enters, and work is carried on in summer as well as in winter by gaslight. I hope that before long the local authority may take some steps in the matter.

"I would be glad to see it made compulsory to have workshops, and probably also factories, closed during meal hours so that they might be thoroughly aired, and the temptation to work in meal hours removed. It is not uncommon, in visiting in a dinner hour, to find machines at work and a number of girls sewing, and on making enquiry into this, to be told that they are not working for their employers, but for themselves; having brought in work with them in the morning. Many dressmakers supplement their wages by taking in work at home, and take every spare minute to work at it. It is very natural that they should do so, but I take it that it is really contrary to the spirit of the regulation of the five hours' spell of work. Also, it is impossible for an inspector to know whose work is being done, and an opportunity is given to an unprincipled employer to employ his workers in illegal hours. I do not doubt, that, if the closing of workrooms in meal hours were made compulsory, many employers would arrange to provide a dining-room where those workers who are too far from home to return there, could take their meals and pass the time; or that some of the societies interested in working girls would devise some means of providing a shelter for them.

"I have not found any new workshops, except in Glasgow, notice of the opening of which had been sent to the inspector, and in connection with this, I feel called upon to mention that in most of the towns in which I have been inspecting, I have visited the post office, specially to see if the notice with reference to this was exhibited, and that only in one instance have I seen it affixed in such a position as to make it at all likely to be observed.

"In conclusion, I should like to state that where I have drawn the attention of the medical officer of health to any sanitary defects, I have been gratified by the prompt attention they have received, although, it is only in a very few towns that any systematic visiting of workshops seems to be undertaken by the local authority."

ii. "*Assistants*" *to Her Majesty's Inspectors.*

As it was evident that the existing staff of inspectors could not visit the *workshops*, especially in the manner contemplated by the Act of 1891, they being so very numerous, and as it was also evident that upon the efficiency and vigilance of the inspection brought to bear upon them the observance of the law would depend, you considered it desirable to introduce into the service a new class of inspectors, not so highly educated nor so highly paid as those on whom the work has hitherto devolved, but drawn from the working class themselves; men, who from their antecedents and from their training might be supposed to have a specially keen eye for the sort of defects which deteriorate the health of the workers who are to be found in these places. You accordingly appointed 15 assistants to H.M. Inspectors, all of them working men, in order to reach amongst others the lowest class of workshops, places which, but for their appointment, must have remained undiscovered, and their evils unremedied. Even this large reinforcement has left us still short-handed for the work we have to accomplish, but you have announced your intention shortly to increase the number of this class of public servants. This is in accordance with the request contained in the memorial of the Trades Unions of the United Kingdom, as represented by the Parliamentary Committee of the Trades Union Congress, and the delegates present on the deputation to the Secretary of State in 1882, when they requested that the staff might be doubled by the appointment as sub-inspectors of 50 persons having a practical knowledge of manufacturing processes. Each of the sub-inspectors to be under the supervision of of the inspector of the district to which he is appointed. They remarked that "the merit of this plan is that it would not "necessitate a rearrangement of the districts, but without disturbing a settlement, which has doubtless been the result of "long experience and careful consideration, and, we believe, "works admirably, we propose to make such an addition "to the staff as will enable them to make the inspection of "*workshops* a reality and not a mere pretence, as it is at present.

"The proposal we make may be adopted without an important "increase in the public expenditure. We suggest that the sub-"inspectors receive, on appointment, 100*l.* per annum, to increase "by annual increments of 10*l.* to a maximum of 200*l.* per annum, "and that meritorious service and ability should be able to look "with confidence for a reward by promotion to the rank of "inspectors as vacancies arise."

The Trades Union Congress, in 1893, unanimously thanked the Government for having appointed a new grade of inspectors, but urged the Government to still further to increase the number. The Parliamentary Committee remark in their Report for 1893, that "the new grade of inspectors instituted by Mr. Asquith we "regard as a matter of great importance. The Congress has long "ago expressed its sense of the necessity for an experiment of

" this kind, and we sincerely hope that the results may justify the " action taken by the Home Secretary."

The report of Mr. Lakeman will show that the plan you have adopted has been most useful in London, where the greatest evils existed, and the results shown in this Report will doubtless lead you with greater confidence to increase the number of this class of officers, as you have intimated your intention of doing, so that that their services may be made use of in other towns as well as in London, Glasgow, Belfast, and Cork, where they are at present located.

Mr. Lakeman observes :—

" Justification for the transfer of the inspection of workshops from H.M. Inspectors of Factories to a new class of officers styled Inspectors' Assistants, appointed solely for that purpose can only be proved by results. The selection of these officers from an operative class chiefly, some of whom were skilled, others unskilled, was quite a departure from previous ones, and in proportion to the training received by them so have I found a greater and less degree of intelligence and aptitude amongst the nine members of my staff.

" It was known long ago that H.M. Inspectors could not efficiently inspect every factory and every workshop in London and other large centres, therefore in due time the separation of duties was wisely accomplished.

" In February of this year, the work of organising the new department was assigned to me, and, between February and April, the choosing of offices, preparation for arrangements of divisions, the setting up of registers and forms required under the new system, the fixing of boundaries and central points, engaged my attention.

" In April my plans were matured, when I began by corresponding with and interviewing the medical officers of health some of whom had entertained the idea of impossibility in carrying out the provisions of the Act of 1891 as set forth in section 27 (27) in respect of the keeping of lists of outworkers, and of copying them, by sanitary authority.

" The result was highly satisfactory, for I was fortunate in securing the most cheerful co-operation of every medical officer of health within the area of the jurisdiction of London County Council and City of London, as also that of the medical officer of health attached to London County Council and the officers thereof supervising the departments of labour, of buildings and of schooling; each and all have worked very harmoniously with me, and to whom my best thanks are due. In May and June appointments were made, and after training those who presented themselves, I set them to work.

" At first some of the west end occupiers expressed themselves warmly and exhibited rather a stubborn attitude, involving correspondence and personal interviews, but every one of these cases served as an object lesson which I turned to advantage.

" When the staff was complete, I assigned districts to those whom I thought most likely to give me satisfaction therein, in which I am not disappointed, for the complaints are fewer and friction less, and as all references are required to be made to me, whether complaining or requesting information, I become thereby fully acquainted with all that has transpired in respect of inspection.

" As soon as each division was assigned, visiting in blocks was commenced, so that every workshop, great or small, of whatever

description, was inspected in each block, of which entries were made in rough registers preparatory to setting up new and complete records of each place, not yet, of course, finished.

"Some of the assistants by their previous knowledge of factory and workshop life, soon fell into line and after a short period of instruction, were capable of producing creditable reports, revealing the whole state of employment in the workshops inspected, as can be seen by reference to the weekly reports of those to whom I allude.

"I cannot, however, report so favourably upon all at present, as to aptitude, or perception of the fact that there is work to be done in a certain way, under positive conditions, reservations, and instructions from which no departure is sanctioned.

"To take men unaccustomed to much writing, without the slightest notion of reporting, and who had not been trained by previous callings to any such discipline as is required of them here, was but to transplant them into a foreign existence, and, as it were, to begin life over again, but experience will add to their knowledge, for all are willing, and if I succeed in infusing a deep interest in their work into the very few of those of whom I am writing, I shall hope to find that capability will follow in proportion to the pains taken to instruct them. In August I was anxious to give effect to the instructions of the Secretary of State as to outworkers and domestic workshops, and therefore all occupiers who came within the scope of section 27 of the Act of 1891 were called upon to provide lists of their outworkers, which have been copied by the inspectors' assistants, and after all had been collected as far as possible, each assistant took his own out of every list and inspected, reporting upon every case where insanitation, overcrowding, and want of ventilation were found, upon which a notice was sent to the medical officer of health for the district wherein each outworker resided, so that in every instance the medical officer of health has been notified and records kept here, and if it were possible for the sanitary inspector to send me a circular signed by the medical officer of health, of the result of his visits upon our complaints, our register would be complete in each detail, and much time would be saved, for under the suggestion, it would be most valuable to report that diseases will not be engendered by dirt or foul air or by unhealthy closets, or if found that they have been arrested, I consider this co-operative system in respect of ensuring sanitation in workshops most excellent.

"I may mention as significant of the tendency of the new system, that after inspection by the assistant and then by sanitary inspector, a large employer of outworkers in the West End, took his medical adviser to the workrooms of every outworker with a view to the securing of all the sanitary conditions of the new Act, although the class of persons employed by him were superior in habit and workmanship.

'You will remember that the evidence given before the Sanitary Committee showed that the evils consequent on low class labour were centred in industries called domestic or outworking, that to find them out and to apply a restrictive law to the occupiers was a task too difficult to be undertaken, as the attempt would fail through want of powers to interfere or even of ability to find out, the workers were called the residuum of labour, incapable of being legislatively dealt with. Yet, under the perfected clauses 9, 11, 13, 27, of the Act 1891, the attempt has been made in respect of this class of workshops for the first time throughout the London area, with results exceeding my favourable anticipations.

"In the inspection of Gentile outworkers in the tie, shirt, and clothing trades located in the Poplar division, I am informed by Mr. Bineham

who reports on his findings, that generally one or two rooms are hired wherein domestic employment is carried on, in other instances two or three women up to five in number, being no relation to each other, are found in one room, each doing her own work, as outworkers. As yet no children nor more than a score of young persons have been found in either class, a proof that this kind of labour is really what the official terms imply, and that young hands prefer the life of a factory or workshop hand, influenced no doubt by the prospect of regular employment and larger pay.

"Out of the 3,825 outworkers and domestic workshops visited since August, the sanitation has been found to be fairly good, the hours of labour vary from seven to ten hours per day, whilst in trouser-making and vests hours are very much longer because the wages are lower and the sweating element accentuated. It is reported that amongst the Gentile workers the general condition of life is higher than amongst the Jew workers, and a superior standard of living is apparent, which I attribute to the altered system of contracting and sub-contracting amongst the Gentile workers, for the outworkers now take the goods direct from the warehouses where they are cut out, instead of receiving them from the middleman, who made the most of his position and had the best of the profits.

"I am indeed glad to be able to state this for I know right well to what extent this system prevailed some years ago, and this altered state may account for the report made upon the higher standard of living now obtaining.

"The shirt trade, too, is establishing branch agencies whence goods are given out direct from headquarters without the intervention of the middleman. The economic value in this is apparent, upon which much could be written, for I maintain that if it be possible to place the domestic industries upon some firmer basis in all that relates to the intent of inspection, we shall be able to work upwards from this, the lowest form of labour, and establish throughout our land some comfort in employment, and the necessity amongst employers of adopting a higher scale of pay. This, Sir, shall be my great aim throughout the area I have the honour to supervise.

"But in the domestic and outworking rooms of Jews, working for Jewish masters, labour continues to be excessive, for the pay is disgracefully low, as shown in my Statistical Report for 1887. It is here we find sweating in earnest, the wage fund is not kept before the employer, nor is it sustained by the profit on capital through labour, the the very lowest price is quoted and accepted in the face of superabundant labour, and dire poverty ensues. Here, also, we find sanitary law utterly inoperative, and no wonder, when wages do not suffice for the purchase of a pound of soap.

"In every instance the medical officer of health has been notified, and I do hope that they will take advantage of their powers under Sec. 4, Sub-sections 3 & 4, and compel *owners* of these tenements to do their duty.

"The following letter is really a true statement of the victims to keen competition, I give it as it is written.

"'Dear Sir, November 14, 1893.

"'There is the factory act over the workman not allowing him to work after 8 o'clock at night, which he or she has to, is no fault of theirs or their masters, here are the shops or firms they work for shoving their work back to the last minute, the workman perhaps not having had a stitch to do all day and going to the firms at different intervals in the day asking if thers anything to do then, he is told there is not anything

at present, call in the evening, he calls again in the evening about six o'clock, waits there till perhaps seven (7) o'clock when he receives 2 pairs or more of trousers for next morning 10 o'clock very certain, else no use or he'll get the sack if not in to time which he must get in to time or lose the trade which is very hard to the workman under such penalties as under the factory act and employer which I think the Government ought to have an Act for shopkeepers and firms giving their workpeople ample time of making their goods so that they need not sit till after 8 o'clock at night in working on things just received, hoping you will excuse me writing and hoping you will take this letter in consideration.

"'Your obedient

"'A WORKMAN.'

"Suppose this poor man were caught at 11 or 12 o'clock at night, employing his women, he would be fined, and if he declined to run the risk he might starve, and his women, too. I insert the letter because I know that the practice is general in all classes of clothing trade, it means the lowest payment by exceptionally hard, taskmasters. Yet with all this grinding in labour, I am glad to find that the work undergone by my colleagues and myself for many years in the East End amongst tailors and bootmakers as well as in various City industries has not been fruitless in checking inordinate overtime, and in improving the sanitary condition of many foul dens and workshops.

"But when I look to West End workshops and learn of the extent of noncompliance with the law as to sanitation and employment, I confess to utter astonishment at the don't care spirit some of the large establishments exhibit. Allow me to tell you, Sir, that it is not speaking the whole truth to say that the Workshop Act has abolished sweating in the West End, or that its provisions have been respected as to meal hours, periods of employment or by rendering obedience to the conditions for overtime, after so many years.

"We shall have very much to do in checking all this, the magnitude of the businesses and their associations seem to inspire some of the occupiers with an idea that law was not made for them, but that flesh and blood are convertible terms for labour and profit. I write seriously, for terrible as have been the exactions upon the labour of females in the East End sweating dens, those luxurious show rooms, and elegantly appointed reception rooms, which administer to the wants of aristrocatic customers, are in sad contrast with the overcrowded and badly ventilated workrooms behind, where the hours are very excessive and the meal times cribbed.

"Let us not be deceived, it is stitch, stitch from morning to night, labour and profit on one side, pale faces and wearied bodies on the other, liable to dismissal at any moment, and all for a few shillings per week as wages.

"It is admitted that wages are drawn from capital which is the product of labour, and that wages *ought* to be determined by the amount of the produce, and that the amount of produce should depend largely upon the efficiency of the labour, and the efficiency of labour alone should determine the *quantity* of wealth the workers can create, but if the efficiency of labour depends upon physical strength as well as on the skill of the workers, it follows that healthy employment can only preserve the efficiency upon which profits depend.

"It might be argued that my former remarks are upset by the arguments used here, if it can be shown that to make dresses of every kind at all seasons for the class under review, efficiency of labour *is* preserved,

and, therefore, that the conditions of labour are quite up to the legal standard.

"But do we know of the numbers that fall in the struggle for existence, how many are used up as soon as the seasons are over, and what efforts are made to gain strength enough to endure the next year's term of toil? I am asking this question after the existence of a thirty years' Act.

"There are degrees of comfort in labour to be found in West End establishments, of this I rejoice, and I hope that the influence of generous treatment by many employers will be followed by others, and if the provisions of the law be strictly upheld, we may succeed in causing a more general acceptance of the doctrines of *natural* law, even in the face of the new economic system, which I fear denies the practicability of setting aside a wage fund for distribution amongst workers. However this may be, I make this promise, that all who read may learn, that I intend with the aid of my inspectors' assistants, to strive to effect a change in the methods of employment now obtaining. I shall strive to give life to the Act of 1891, and in order that it shall not lie unproductively in my hands or become inoperative for want of full instructions, I shall pursue a course of frequent inspections by day and by night, and request in every workshop that the sum total of obligations be religiously observed in spite of speaking-tubes, delays for admission, and demands for authority, harmless instruments these, for effecting a purpose.

"As a proof of the correctness of my statement, I subjoin copy of one letter out of very many—

"'Sir,—I wish to inform you that a lady that carries on business (dressmaking), at — W. does not comply with the Factory Act, I am one of the hands at the above address, and know this to be correct, our employer is one of the most unfeeling, unjust women you could meet, no matter how tired or weary or how ill you may be, you dare not complain, if we do, all we get is a sneer and laugh and most likely discharged at the end of the week. One poor girl (an indoor hand) was turned out into the street at 9.30 the other night for not being able to work any longer, she had been ill several times and was in delicate health, the girl comes from ——, and had no friends in London, her employer knew this, and yet behaved so heartless. Another thing, Sir, after the hours that you allow employees for overtime, we are sent up into the bedroom to work and told we are to say it is our own dresses we are doing should the inspector call, and most of us dare not refuse, as I, like many others, am depending upon my work for bread. We are served the same way on Saturdays, so we have not even that day to look forward to for rest. Being strong myself, I do not feel it so much as others, but to see the white faces and tired look of some of the girls makes one resent this injustice. It is the employers who benefit by overtime, we have no recompense whatever either in money or in thanks. I hope, Sir, you will see into this, and not be deceived by her untruths, at present you are deceived and hoodwinked in every direction.

"'Yours respectfully,
"'A Work Girl.'

"The sanitation of domestic workshops and of outworkers' rooms in the West End, is not respected to the extent that it is in the East End, they have been found to be filthy and inhabited by insects innumerable both small and great, playfully wandering over floors and up the walls

seeking flesh and finding 'some,' but I do not fear for their prolonged existence under the watchful eye of the sanitary inspector.

"The medical officers of health have, with two exceptions, agreed to accept 250 cubic feet as a minimum, the other two insist on 300, density of populations being the basis of the requirements. The synopsis of work done, as shown in the subjoined tables, will enable you to see that 168 notices of overcrowding have been sent; in many of the 168 workshops reduction has been made, and in some, overcrowding has been remedied by the taking another house; but, on the other hand, where we have checked illegal overtime, occupiers have been tempted to overcrowd their rooms, especially at nights; this evil will be dealt with very shortly.

"I now beg to furnish you with a statement of the system under which we work; 1st, the setting up of a register for all complaints which are entered, they are then enquired into as soon as possible, and the particulars of results are added to the former entries; 2nd, a register of all cases submitted to the medical officers of health; 3rd, a register for results of inquiry into our complaints, received from the medical officers of health; 4th, a general correspondence register. All notices appertaining to each officer's division are kept by him, sorted into names and dates. Overtime certificates for the whole of our area are treated likewise, for it is of importance to be able to verify statements or to strengthen evidence by the production of overtime certificates at once, every anonymous or signed complaint is registered and preserved.

"My object has been to be able to show at a glance the sum total of all that we have done, so that a system will have been commenced in respect of workshops such as has not been heretofore adopted. You will also see that as soon as each division will have been thoroughly explored I shall be in a position to give the total number of children, young persons, men, and women at work within the area of the boundaries of London County Council and City of London; the return will I submit, prove valuable by the side of my Statistical Report of 1887.

"The subjoined tables prepared by Mr. Whitelaw from each of the registers above named, who keeps them in addition to his inspections, will, I hope, meet with your favouring approval, as it certainly does with mine.

WORKSHOPS VISITED and NUMBERS EMPLOYED.

Inspector.	Number of Workshops Visited.	Number of Outworkers Visited.	Domestic.	Men.	Women.	Young Persons.		Children.	
						Male.	Female.	Male.	Female.
Fallows, Samuel	1,574	477	401	448	2,033	119	518	—	—
Hayward, Thomas	1,239	357	82	1,672	1,586	213	708	2	3
Whitelaw, C. E.	922	263	137	1,543	1,564	212	426	6	4
Mackie, J. T.	1,273	703	431	1,803	4,941	106	610	—	5
Davis, Tom	1,231	223	116	1,987	2,636	308	739	—	—
Bineham, John	1,403	1,256	509	3,027	3,872	252	2,505	4	—
Goddard, R. A.	834	200	112	1,183	2,326	215	760	1	1
Thomas, A. M.	1,206	160	150	1,029	2,181	151	499	—	—
Read, H. E.	741	186	116	1,555	3,813	244	1,958	—	—
Totals	10,423	3,825	2,054	14,247	24,952	1,820	8,723	13	13

COMPLAINTS to MEDICAL OFFICERS of HEALTH. May to 31st October 1893.

No. sent.	Acknowledgements.	Letters saying Defects remedied.	Check visits.	Defects remedied.	Second complaint.	Complaints relating to Outworkers.
444	165	None	52	25	27	144

Overcrowding	168 complaints	Drains ventilating on to works	3 complaints
Dirty condition	140 "	Choked drains	4 "
Insanitary condition	63 "	No water-closet accommodation	1 "
Dilapidated condition	3 "	Insufficient water-closet accommodation	2 "
Foul w. c. pan	5 "	Injurious fumes into works	1 "
Required limewashing	19 "	Domestic water supply connected with water supply for water-closets	7 "
Sanitary defects	6 "	Bed-room used as a workshop infested with vermin	1 "
Defective drainage	1 "	Total	444
Defective ventilation	10 "		
Defective water-closets	3 "		
Defective roof	7 "		

COMPLAINTS from MEDICAL OFFICERS of HEALTH. May to 31st October 1893.

No. received.	Dealt with.	Nature of Complaint.
2	2	Employment of young persons.

COMPLAINTS, CORRESPONDENCE, NOTICES of BEGINNING to OCCUPY, and REMOVALS.

No. of Complaints received.	Dealt with.	No. of Letters asking for advice, &c.	Replies given.	Notices of beginning to occupy.	Visited and forwarded to Medical Officers of Health.	Notices of Removal.	Entered in Register and forwarded to Medical Officers of Health.
315 of the usual character.	315	218	218	148	148	18	18

PROSECUTIONS. May to 31st October 1893.

No. of Firms prosecuted.	Number of Cases.	No. of Cases dismissed.	Total amount of Penalties.
71	242	14	£ s. d. 203 0 11

These returns are copied from entries made by Mr. Whitelaw in the registers of this department and drawn up by him.

"These tables are the outcome of five and a half months' work. Three of the assistants were appointed in July, three in June, and three in May, and when I tell you that very many of the workshops have been visited for the first time, and that forms have been sent to each, and second inspections made to afford instructions, I hope that you will be able to congratulate my staff upon their performances.

"The furriers in Islington and the cabinetmakers of Hoxton and Shoreditch have been taken in hand by Mr. Goddard, who reports that the former are running riot against all reason, and that the latter are employed under very unfavourable conditions as to sanitation, both are working overtime incessantly and illegally, and without forms; they will engage his special attention.

"The West End occupiers are under the charge of Mr. Mackie, already he has had several prosecutions for illegal night employment, and the sending of notices to medical officers of health, in addition, has not been neglected; and Mr. Davis who has charge of a large district in which are many occupiers of the West End type, has worked very industriously and efficiently.

"The inspection of laundries was made under your circular letter of August last, to as many as was possible within the prescribed period of your order, and a full report was forwarded to you in September, so that I presume there is no necessity to trouble you with a recapitulation.

"In conclusion I would ask your consideration to the feasibility of a plan of mine in respect of overtime registers for workshops. Knowing the varied conditions, positions, and employments of workshop occupiers, I submit that we should be able to checkmate them in every dodge; it is high time we did under our high pressure systems. I should like for registers to be printed for workshops only, and addressed to me here, so that we may at once follow up the previous night's overwork, and the date of current year printed on every leaf.

"This simple plan would greatly assist your clerical staff at Home Office, and enable me to keep a good hold on inordinate overtime.

"If in time it may be my good fortune to find that workshop inspection has been productive of as much good throughout our area as it has been in the East End and City through years of devotion thereto, I shall be very grateful for the opportunity I have had of devoting my life to this noble work in an extended jurisdiction."

iii. *Additional Local Offices and Clerical Assistance.*

The offices which have been opened for the use of Her Majesty's Superintending Inspectors in London, Leeds, Glasgow, and Birmingham have proved most useful, and have greatly facilitated the carrying out of the reforms you have instituted.

As stated in my last Report, it is of great importance that there should be recognised permanent public offices in the principal centres of industry, and I am gratified to find that you have decided on having offices in Manchester, Liverpool, Blackburn, Sheffield, Newcastle, Nottingham, Norwich, Bristol, Southampton, Plymouth, Swansea, Edinburgh, Dundee, Dublin, and Belfast, which will aid in making the provisions of the Act and the sources whence information can be obtained, more generally known.

The following extracts from reports received from some of H.M. Inspectors, will show the necessity for the appointment of

"Assistants," who will aid in the clerical work as well as visiting workshops, and it also shows the desirability of having offices in the different districts.

Mr. Bignold, H.M. Inspector, reports as follows :—

"*Clerical work.*—On this subject I cannot do better than quote the concluding words of your Annual Report, dated January 1893 : 'I think 'it will be necessary to add to the number of assistants, who will assist 'H.M. Inspectors in clerical work (which now occupies too much of 'their time) as well as in the general visitation of workshops, including '*those of outworkers.*' Since January my clerical work has been greatly increased, but I have had *no assistance whatever*, either in the clerical work or in the inspection of the factories and workshops of East Anglia, of which I have the sole charge."

Mr. Ashworth, H.M. Inspector, Ashton-under-Lyne, remarks :—

"I should like to point out that office work now takes up a very considerable portion of my time. The examination of overtime notices, official correspondence, more details and particulars in weekly report, sending notices to medical officers of health, and the keeping and entering these particulars in the register provided for this purpose, and latterly the entry of particulars in complaint book, almost imperceptibly but certainly materially add to the clerical work, and inspection must, to a certain extent, suffer in consequence."

Mr. Bowling, H.M. Inspector, Southampton, observes :—

"I would remark that though the junior inspector in this district, Mr. Harston, has rendered me most valuable assistance and worked in the most unflagging manner, the work expected of us can never be duly performed until further help is afforded us. This is especially the case with our clerical work. The number of books, papers, reports, &c., to which we are asked to give our attention, and which show a tendency to increase each year, makes it *impossible* that the office work of such a district as this can be properly conducted without a well arranged office and the assistance of a clerk."

Mr. Jones, H.M. Inspector for Devon and Cornwall, reports :—

"During the last 12 months a slice has been taken from my district, Honiton, Ottery St. Mary, Sidmouth, Exmouth, Topsham, Cullompton, &c., having been added to Mr. Bowling's district, he having now an assistant; but by examination of the statistics forwarded, it will be found that, counting the new factories I have added to the register during the 12 months, the numbers are almost identical with those sent last year, whilst the number of workshops on the register has considerably increased."

Captain Smith, R.N., Her Majesty's Inspector for Sheffield, remarks :—

"A central office is wanted here probably more than in Leeds or Birmingham where they are established. Clerical assistance is necessary. At present my house is used as a factory office, sometimes at great inconvenience."

Mr. Woodgate, H.M. Inspector, Dublin, remarks :—

"Since my last report the county Down and part of Armagh has been detached from this district, and included in the Belfast district.

"In November 1892, Mr. Taylor was appointed one of H.M. Inspector of Factories in Ireland, and during his residence here he has been located at Limerick. His time has been chiefly occupied in visiting outlying corn, scutch, and saw mills which have not been visited for some time, and enforcing ther equirements of the Act of Parliament as regards guarding machinery, &c. Mr. Taylor has now left Ireland on transfer to the Home Office London, and Mr. Shuter has been appointed in his place.

"Mr. Ryan has also been appointed an inspector's assistant to reside at Cork, and has entered upon his duties visiting the various towns throughout the district, with a view to carrying out and enforcing the provisions of the Act of Parliament in all workshops, such as dress-makers, tailors, bootmakers, saddlers, and all places where no steam, water, or gas power is used.

"In August last, Mr. Calder, one of H.M. Inspectors of Factories, was sent to assist in visiting scutch and corn mills, and I cannot speak too highly of his valuable assistance in visiting and enforcing the law as regards machinery, especially in the counties of Donegal and Tyrone. During the five weeks he was here he visited 344 factories, travelling by car 650 miles. After his visits he sent letters to the different occupiers asking if they had carried out his instructions as regards guarding machinery, and he reports he is much gratified to find his letters so promptly and satisfactorily answered. It will be necessary to have all these places visited again with a view to seeing that the directions have been thoroughly and efficiently carried out.

"*Certifying Surgeons.*—During this year I have been endeavouring to get the different dispensary doctors in their respective districts to act as certifying surgeons as required under the Factory Act. I have to report that I have found much difficulty in getting many of them to act, as in the majority of cases the only emolument of this office is the fee payable by Government for the investigation of the accident. I find that since February 1893, the number of dispensary doctors who have been appointed is 159, and there are still a number more to be appointed in the various country districts. The total number of certifying surgeons to this date is 269."

iv. *Personation of Inspectors.*

Mr. W. D. Cramp, H.M. Superintending Inspector, reports as follows:—

"There have been two cases of personation of a factory inspector in my division during the present year. In the first case, a young man of highly respectable parentage obtained access to a pottery after working hours, on the pretence that he was a deputy inspector of factories and wanted to see that no women or young persons were at work. He was prosecuted, and the Potteries Stipendiary imposed a fine of 5*l.*, and 2*l.* costs. In the other case, a man well known to the police, visited works during the night in Walsall and neighbourhood, and at Burton in the day time; representing himself as 'Chief Commissioner of Factories for three counties, viz.: Leicester, Derby, and Stafford.' Before we could take proceedings against him, the police got hold of him, and prosecuted him for obtaining food, lodging, and money by falsely pretending to be a Government Inspector of Factories. He is now undergoing three years' penal servitude.

II.—Dangerous Trades.

i. *White Lead, and Works in which White, Red, and Yellow Lead are Manufactured or Used.*

The manufacture of white lead, it is well known, has been always included amongst the dangerous trades, and the principal object of the Act of 1883 was to devise some means to remedy the evils incident to this trade. Mr. Redgrave, the late Chief Inspector, collected much evidence, resulting in special rules which, wherever fully carried out, were calculated to do much good. Mr. Whymper, who succeeded Mr. Redgrave, took additional evidence, and as the result of his enquiries additional precautions were taken.

Mr. D. M. Forbes, L.R.C.P., L.R.C.S.E., the Medical Superintendent of the Shoreditch Infirmary, in his evidence before the Departmental Committee on White Lead, said there was no doubt that the disease had been mitigated by the efforts of the legislature, and that the number of deaths would show it.

The exhaustive enquiry conducted by the Committee you appointed, consisting of—

H. J. Cameron, H.M. Inspector of Factories.

August Dupré, Ph. D. and F.R.S., Lecturer on Chemistry in the Westminster Hospital Medical School.

Edward Gould, H.M. Superintending Inspector of Factories, elected Chairman 20th July 1893, on the death of Mr. Henderson.

James Henderson (Chairman), H.M. Superintending Inspector of Factories.

Thomas Oliver, M.D. and F.R.C.P., Physician to the Infirmary Newcastle-on-Tyne, and author of "Lead Poisoning"; and

Harold John Tennant, Private Secretary to the Secretary of State, as Secretary to the Committee.

has been the means of collecting a still further mass of valuable information.

A great loss was sustained by the death of the Chairman of the Committee, Mr. Henderson; a gentleman of considerable ability, whose opinion on industrial subjects was valued by and carried great weight with both employers and employed. The Committee in their report in recording the great loss they had sustained, expressed the deep regard in which he was held not less for his unswerving sincerity than for his good, kindly and generous disposition, and that the manner in which he conducted their proceedings was conspicuously able.

In accordance with your instructions the Committee made enquiry into:—

The conditions under which Lead Smelting, the working of Blue Lead, and the production of White Lead, Red Lead, Yellow Lead, and Litharge are conducted, with the object of diminishing any proved ill effects on the health of the work-people engaged therein.

The Tinning and Enamelling of Iron Hollow Ware, Culinary Utensils, the Enamelling of Iron Plates, the use of Red Lead in Electric Accumulator Works;

As to whether the Special Rules that already exist with regard to the manufacture of White Lead are sufficient;

And recommended precautions necessary to the industries specified for the protection of life or health which will be found in the following report:—

REPORT to the RIGHT HONOURABLE H. H. ASQUITH, Q.C., M.P., of the DEPARTMENTAL COMMITTEE, appointed by him to inquire into WHITE LEAD and the ALLIED INDUSTRIES.

THE Committee have met and considered the subject-matter referred to them; have visited and inspected many works, and have examined *numerous witnesses in relation thereto, and have agreed to the following Report, viz.:—

1. The Committee have extended their inquiries into England, Scotland, and Wales; they have visited 46 works and examined 184 witnesses.

i.—WHITE LEAD.

2. The Committee are directed to inquire "into the conditions under which the production of white lead" is conducted. It will, therefore, be convenient, in the first place, to describe the method of this manufacture.

3. There are three processes by which white, or carbonate of, lead is produced; (*a*) the old Dutch process; (*b*) the chamber process; (*c*) precipitating processes.

4. Of these the one most commonly in use is the first mentioned. The Committee have only seen three examples of the second, or chamber process; and one of the third. There are said to be several modifications of precipitation processes which are in use on the Continent. The Committee are not aware that carbonate of lead is produced in any quantity by these processes in Great Britain.

Manufacture of White Lead.

Old Dutch Process.

5. (*a*.) The desilverized metallic lead (blue lead) is first melted and cast into wickets, also called crates, of various shapes. These are sometimes in the form of gratings, sometimes in the form of thin oblong plates with two holes, and a central flat rib.

(*b*.) In most works the casting is done by hand labour, women being frequently employed; in some, however, the casting is done by machinery, which not only casts the wickets, but delivers them at a convenient place some distance off. The only hand labour involved consists in placing the pig lead into the melting pot, and regulating the flow of the molten lead.

(*c*.) The wickets are next put into stacks (blue beds) for corrosion into white lead. This is done as follows: The floor of the stack, a large cubical space built of bricks, is first covered with a layer of tan; on this are arranged, as closely as possible, stoneware pots filled with dilute acetic acid, and on the top of these are placed four or five layers of wickets in close contact with each other. The whole is then covered over with boards forming a second floor upon which fresh layers of tan,

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* The evidence of these witnesses has been printed and copies may be obtained from Messrs. Eyre and Spottiswoode.

pots, and wickets are arranged as above. This is in its turn covered in the same way, and so on until the stack is full—as many as 10 or more layers going into one stack.

(*d.*) The filling is done through a rectangular opening in the middle of one of the sides of the stack, which is closed by boards as the stack gets filled. As the floors in the stack rise higher and higher the tan, pots, wickets, and boards have to be carried up to greater and greater heights. This carrying is very generally done by women, who have to carry on their heads from 30 to 50 pounds of lead at a time up ladders 10 to 15 feet high.* When the stack is full, ventilating shafts having been left at each corner of the stack, it is closed up and left to itself for periods of from 10 to 15 or more weeks. During this time the conversion of the blue lead into white lead (corrosion) takes place.

(*e.*) The tan soon begins to heat and evolves carbonic acid, the heat volatilizing the acetic acid. An interaction then takes place between the lead on the one hand and the carbonic acid, acetic acid, and air on the other, leading through a series of chemical changes, not clearly understood, to the ultimate production of an amorphous basic carbonate of lead (white lead).† The action goes on until either all the lead is corroded, or all the acetic acid has been volatilised, or no more carbonic acid is produced. During these changes there is always a small proportion of acetate of lead present in the corrosion, some of which is also always left in the final product.

(*f.*) After a longer or shorter period, learnt by experience, the stack is opened and the white lead produced is taken out (stripping the white beds). The various layers before described are taken down in the reverse order in which they were built up. Formerly the corroded lead, which has retained the original shape of the wicket, only increased in bulk, was taken out dry, but according to recent regulations it is now wetted before removal. This is a decided improvement, as the amount of dust, inseparable from the handling of the dry, more or less pulverulent, material, was accompanied with much risk.

(*g.*) The corroded wickets are carried in trays, generally by women, to corrugated rollers over which passes a constant stream of water. In front of these rollers the corroded lead is tipped down. Before this is done, however, the corrosions are either dipped into water or thoroughly watered from a hose, otherwise much dust arises, and even this does not entirely prevent it. In passing between the rollers the wickets are crushed, thereby detaching the white lead from any remaining blue lead.

(*h.*) The crushed material next passes into a shallow tank having a perforated bottom, in which it is raked about, completing the separation of the blue from the white lead. The blue lead is raked out, the white lead passes with the current of water to grinding mills, where it is ground up and run into a series of tanks (wash becks). In these the finely divided white lead settles to the bottom, the water is drawn off, and the white lead is removed, put into earthenware or copper pans and placed in drying ovens (stoves). In some works, however, the soft mud is first pressed slightly in filter presses and the press-cake is put into the oven. This pressing not only greatly reduces the time necessary for drying, but renders the whole process more cleanly and somewhat more free from dust.

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* In some works this very severe labour is greatly reduced either by the use of stages, up which the material can be passed from hand to hand, or by that of hoists worked by machinery.

† The composition of a number is given in Appendix II.

(*k.*) When the white lead is thoroughly dry, which takes from three to five days, the pans are taken from the ovens by hand labour, and the dry white lead is either packed directly into casks or thrown into bins for subsequent conversion into paint. The manufacture of white lead and its conversion into paint are very frequently carried on in the same factory. The emptying of the stoves and the packing of the white lead is necessarily a very dusty operation, since the white lead, being perfectly dry and very friable, readily rises as dust.

(*l.*) In order to overcome this difficulty, several kinds of mechanical drying stoves have been invented which work in great measure automatically, that is, the moist white lead is carried in and the dry white lead removed by machinery, which discharges the dry material through hoppers into barrels. No perfectly satisfactory mechanical stove has yet been devised, and their very high price is also a bar to their general introduction.

Chamber Process.

6. The chamber process is also one of corrosion; but the chamber is used instead of the stack. As an illustration of one form of this process, the following description may suffice. In a chamber similar to that described in 5, (*c.*) are sets of parallel bars on which the strips of lead are hung saddle fashion; the chamber is heated by steam, and the temperature regulated. The carbonic acid is produced by burning charcoal in an oven, the flue of which opens into the chamber. Pans containing the acetic acid are laid on the floor of the chamber. The advantage of this process is that the time required to corrode the lead is only four or five weeks, as against thirteen weeks required by the stack or old Dutch process. When the lead has once been corroded and leaves the chamber, the process is the same as the old Dutch process, and no advantage is claimed for it in the subsequent stages of manufacture.

Other Processes.

7. The Committee do not think it necessary to describe other processes for the manufacture of carbonate of lead, because the quantity produced by them is very small compared with that manufactured by the two processes described above. But they feel it necessary to observe that they have, by the courtesy of the promoters, been admitted over the experimental works of several firms, and they will watch with interest the development of these inventions.

Effects of Lead.

8. (*a.*) It is known that if lead (in any form), even in what may be called infinitesimal quantities, gains entrance into the system for a lengthened period, by such channels as the stomach, by swallowing lead dust in the saliva, or through the medium of food or drink; by the respiratory organs, as by the inhalation of dust; or through the skin; there is developed a series of symptons, the most frequent of which is colic. Nearly all the individuals engaged in factories where lead or its compounds are manipulated look pale, and it is this bloodlessness, and the presence of a blue line along the margin of the gums, close to the teeth, that herald the other symptoms of ***plumbism.***

(*b.*) A form of paralysis known as wrist-drop, or lead palsy, occasionally affects the hands of the operatives. There is, in addition, a form of acute lead poisoning, most frequently met with in young girls

from 18 to 24 years of age, which is suddenly developed, and is extremely fatal. In it, the first complaint is headache, followed sooner or later by convulsions and unconsciousness. Death often terminates such a case within three days. In some cases of recovery from convulsions total blindness remains.

9. There has been considerable doubt as to the channels by which the poison enters the system. The Committee have taken much evidence on this subject, and have arrived at the conclusion—(*a*) that carbonate of lead may be absorbed through the pores of the skin, and that the chance of this is much increased during perspiration, and where there is any friction between the skin and the clothing; (*b*) that minute portions of lead are carried by the hands, under and round the nails, &c., on to the food, and so into the stomach; (*c*) but that the most usual manner is by the inhalation of the lead dust. Some of this becomes dissolved in the alkaline secretions of the mouth, and is swallowed with the saliva, thus finding its way to the stomach. Other particles of dust are carried to the lungs, where they are rendered soluble and absorbed by the blood.

Existing Special Rules.

10. The Committee are directed to ascertain "whether the Special "Rules which already exist with regard to the manufacture of white "lead are sufficient." These rules are as follows, and are now in force in all the factories where this manufacture is carried on:—

Factory and Workshop Act, 1891.

SPECIAL RULES.

White Lead Works.

Duties of Occupiers.

They shall provide sufficient bath accommodation for all men and women employed.

They shall provide dressing-rooms, lavatories, and a cloak-room in which the ordinary clothes of all workers are to be kept apart from their working clothes.

They shall arrange for a weekly visit by a doctor, who shall examine every worker individually, and who shall enter the result of each examination in the proper register.

They shall cause such a register to be kept, and shall have entered in it the date when each worker commences and leaves employment, and the date when each worker takes a bath.

Duties of Superintendents and Persons in charge of Departments.

They shall cause each man or woman to take a bath at least once a week, and to wash in the lavatory before bathing.

They shall deliver to the persons employed the articles of clothing which are required to be worn, and they shall see that they are put on. At the end of every day's work they shall collect and have thoroughly washed all those which have been used in the stoves, and those which have been used in other departments, once a week.

They shall see that the general lavatory is thoroughly cleansed and supplied with clean towels after every meal.

They shall have the dressing-rooms, baths, and w.c.'s brushed and cleansed daily.

They shall not allow the workers to leave any clothes in the dining-room, or their ordinary clothes in any work-room.

They shall see that the supply of hot and cold water, soap, brushes, and towels is sufficient in the bath-room and lavatories.

They shall see that there are kept in close proximity to the workers in each department washing conveniences and a sufficient supply of sulphuric acid drink, or other approved sanitary drink, and they shall cause the people to take it.

They shall set apart and cause to be entered in a notice affixed in each department a period of at least 10 minutes, in addition to the regular meal-times, for washing immediately before each meal-time, and also before the end of the day's work ; and they shall see that it is observed.

They shall see that at the doctor's weekly visit the proper entries are on each occasion made in the register.

Upon any person complaining of being unwell, they shall, with the least possible delay, give an order upon the doctor; and upon any person desiring medicine, they shall give a dose of the prescribed medicine kept at the works.

Managers, &c. shall report immediately to the firm any instance which comes under their notice of any worker neglecting the regulations hereinafter mentioned.

They shall examine all persons going out of the works, and shall not allow them to leave unless they are properly cleansed from lead.

As to Persons Employed.

Each man or woman before commencing work in any of the following departments shall wear as follows, having received the same from the person in charge :—

White-bed -	One overall suit. Women inside the white-beds to wear respirators also, but the "Carriers" not.
Washing and crushing -	One overall suit. "Roller" women to wear respirators also.
Grinding -	One overall suit.
Setting stoves -	One overall suit and head covering.
Drawing stoves -	One overall suit, head covering and respirator.
Paint mixing -	One overall suit and respirator.

Each man or woman working at any white-bed, or in setting or drawing stoves, or in the washing and crushing, grinding, or paint mixing departments, before going to breakfast, dinner, or home, or before entering the dining room for any purpose whatever, must—

Put off the overall suit, &c., and give the same to the person in charge, or leave it in the clothes room.

Brush every particle of lead dust from his clothes.

Thoroughly wash face and hands in the lavatory, and be particular that no dust remain underneath the finger nails.

If not wearing stockings and boots, thoroughly wash the feet.

Each man or woman must bathe at least once a week, and must wash in the lavatory before bathing.

Each man or woman must receive and drink, at such times as may be stated in a notice affixed in the factory, such sanitary drinks as may be prescribed in such notice.

Every white-bed must be adequately watered on removal of boards, and all trays of corrosions shall be well saturated with water before passing through the rollers.

No persons shall smoke or use tobacco in any workplace or room.

Respirators—These may be pieces of flannel or knitted wool, covering nostrils and mouth.

Prescribed medicine.

The following Departments to be specially Ventilated.

(1.) Washing and crushing.
(2.) Grinding in water.
(3.) Paint (grinding in oil).
(4.) Drawing stoves. No cask or other receptacle to be filled except under ventilators.

H.M. Chief Inspector of Factories.

Danger of Working.

11. The Committee find that the danger attending the manufacture of carbonate of lead by the old Dutch process is centred in (1) the stripping of the stacks, or, as it known in the trade, the white beds, 5 *f.*; (2) the rollers, 5 *g.*; (3) the washbecks, 5 *h.*; but (4) chiefly, as has been said, in the stoves and the packing, 5 *k.*

12. A great deal of evidence has been heard respecting the danger incurred by the workers in these departments; from the operatives themselves, from foreman and employers, and also from the various medical men attached to the works.

13. After duly considering all the evidence, the Committee have come to the conclusion that (*a*) women are more susceptible to lead poisoning than men, and (*b*) young girls than full-grown women. On an analysis of the evidence of the doctors whom they have examined, it will be found that on question (*a*) this is the opinion of eight out of thirteen, and that only four dissent; while on (*b*) fourteen doctors agree while three disagree.

Recommendations.

14. The Committee desire to draw attention to the figures in the Appendix showing the number of grains of lead per gallon of liquid, taken from the washbecks of six different factories. This lead is partly in the form of acetate and partly in the form of sub-acetate. It will be seen that in No. 3 Factory the amount of acetate of lead in solution was extremely small, while in No. 4 it was very large.

The workers have to plunge their hands into this liquid, and are splashed with it up to the elbows. This operation in No. 4 Factory must be attended with considerable danger.

The Committee direct the attention of the manufacturers to this point, in order that they may either (1) treat this washing water, from the first tank below the rollers, in such a manner as to render it free from acetate of lead in solution; or (2) discontinue the practice of allowing the workpeople to put their hands into it.

15. The Committee attach the utmost importance to cleanliness, to the medical inspection, and to a sufficiency of good food. They are glad to report that it is the almost universal testimony of employers and employed, and of the medical attendants of the works, that the Special Rules issued in 1892, especially those having regard to the weekly bath

and to the periodical medical examination, have been attended with most beneficial effects.

16. The Committee have found certain firms who give their employees some food either before beginning work, at eleven o'clock, or at the dinner hour. They welcome this movement on the part of the employers; and although they do not feel that they would be justified in making this a meal compulsory provision, yet they trust that it will become universal in the trade. On a reference to the evidence of Drs. Forbes, 39; Debenham, 505; Babst, 1741; Yoakley, 1881; Cooper 4469; Dobie, 6013; Smith, 10698, &c.; it will be seen how difficult it is to lay too much stress on this point.

17. The Committee recommend that to the rules be added one whereby no female should be employed without previous examination, and a certificate from the medical attendant of the works certifying that she is of the required age and a person fit for the employment; and further that no employee who has been absent from work through illness should be re-employed without a medical certificate to the effect that he or she has recovered.

A rule adopted for this purpose should be incumbent on the employee equally with the employer; and it should be made clear that a worker attempting to evade it by seeking employment under an assumed name or otherwise would render himself, or herself, liable to a fine.

18. Having regard to the fact that in all parts of a white lead factory where the old Dutch process is in use, there must be some lead dust in suspension in the atmosphere, the Committee recommend that no girl under the age of 20 be employed in such a factory. In order that this recommendation may be the better executed, the Committee advise that every woman, before being passed by the doctor and taken on by the foreman, be compelled to produce a certificate either of birth or of baptism, so that her age may be accurately ascertained.

They recommend that the procuring of these certificates be facilitated in every way, and that the charge for them be made the same for women as it is at present for young persons under the age of 16 employed in factories or workshops, namely, sixpence.

19. The Committee further recommend that no woman be employed in the white-beds, the rollers, the washbecks, the stoves, or in packing dry white lead, and that these departments should consequently be worked in future only by adult males.

Having regard to the drastic nature of the proposed change they would suggest that this provision should not come into force until 1st January 1896.

The Committee hope that the efforts of some of the manufacturers to devise mechanical means for stacking stripping, drying and packing will be emulated by others, so that eventually an adequate and successful process may bo in general use.

20. The Committee have considered at some length the desirability of instituting a system whereby the female workers should change all their own clothing on arrival at the factory for working clothes, to be supplied by their employer, and should put on their own clothes again before leaving the factory; but as they have arrived at the conclusion that working in white lead is not a fit occupation for females, they do not deem it necessary to recommend that women in the blue beds, and in other parts of the works where they are not in direct contact with white lead, should be made to change all their clothes.

They consider the overalls and head covering in use at present in other parts of the factory should be adopted in the blue beds and in all parts of the works.

21. In order to obviate the three sources of danger mentioned in paragraph 9, the Committee in reference to 9 (*a*) cannot recommend that gloves be worn by any employee in handling white lead. They have come to the conclusion that although gloves, when well made and sufficiently often renewed, are a fairly effective safeguard in the handling of more or less hard materials, such as blue lead or damp corrosions, their supposed protection is in a great measure illusory when the article to be handled is either very moist or very friable and dusty, in both of which conditions it readily penetrates the gloves and comes into contact with the skin under circumstances highly favourable to absorption. Consequently the Committee cannot recommend their use, nor do they see their way to recommend their abolition in all cases. There has been some difference of opinion as to the advantage or disadvantage of wearing boots, as well as gloves. It is contented by some that working in bare feet would be safer. But as this involves exposure to cold and wet, and ultimately a thorough washing of feet and legs, the complete execution of which cannot always be assumed, the Committee recommend that shoes and stockings for working in be supplied by the employer, and that every female put on these before beginning work, and change them for her own shoes and stockings again after its completion and before leaving the factory.

The Committee believe that the second source of danger mentioned in 9 (*b*), viz., contamination of food is efficiently guarded against by the Special Rules of 1892, where these are thoroughly carried out.

With regard to 9 (*c*), viz., the inhalation of lead dust, the Committee have made an exhaustive inquiry into the enforced wearing of respirators, and they have had many forms of respirator submitted to them. In the Appendix will be found some interesting facts concerning these, the result of Dr. Dupré's experiments. While it is obvious that a respirator greatly diminishes the risk of inhalation of the lead dust, the Committee do not consider that any respirator can exclude entirely all such dust from getting into the mouth or lungs. They recognise the necessity of adhering to the system of enforcing the use of respirators, although they can well believe that the discomfort and irritation produced by them may at times be considerable. They would suggest that the best form of respirator is one which is in use at some works, and consists of a cambric bag, with or without a thin flexible wire, which can be made to fit over the nose. (*See* Appendix IV.)

In connection with the above, the Committee have heard from many sources, namely, doctors, employers, foremen, and the workpeople, that there is often great difficulty in enforcing the regulations laid down by the Government and by employers for the safety of the workers. They trust that the latter will co-operate with their employers to remedy this in future.

22. The Committee have found that, with a few exceptions, the last clause in the Special Rules which enjoins that "no cask shall be filled except under ventilators" is practically useless, the method of its application being undefined. They recommend that no packing or storing of dry white lead shall be carried on except under a hood connected with a fan, or other device for creating a draught, whereby the dust shall be carried away.

The Committee have seen several such contrivances of an effective description.

23. Although, in the Special Rules, provision is made for dressing-rooms, lavatories, and a cloak-room in paragraph 2, "Duties of Occupiers;" and although the provision of a dining-room is implied by paragraph 5, "Duties of Superintendents," and by paragraph 2, "As

to persons employed," yet there is no special rule insisting on such an apartment. The Committee recommend that it should be expressly stated that a dining-room must be provided as one of the "Duties of Occupiers," and that it be one of the "Duties of Superintendents" to see that no one takes any food in any other part of the works than the dining-room. The Committee are aware that the Act of 1878, Section 39, renders it illegal for a woman to "take any meal in a part of the factory where the process of making white lead is carried on."

24. In connection with the danger in the white-beds alluded to in paragraph 5 (*f*) the Committee recommend that every stack be fitted with a stand-pipe or moveable hose, furnished with a rose at the end of it, and with an adequate supply of water, for damping the white-bed, previous to stripping it. They have found that manufacturers too frequently trust to the use of the watering-can. The Committee deprecate this custom, as it involves a considerable amount of labour, and is apt to be omitted.

25. Another possible danger has been suggested by several witnesses with regard to the white-beds, namely, stripping them before the corrosion is completed. It has been pointed out that no manufacturer would strip a stack knowing it to be incompletely corroded, as it would be against his interests to do so; but the Committee have heard of cases where it has been done, to meet the exigencies of the market, with injurious effects to the operatives. In order to overcome this, the Committee suggest that no white-bed should be stripped before it is "mature."

ii.—Sulphate of Lead.

26. There is another compound in the market in competition with carbonate of lead, viz., sulphate of lead. This is produced by several firms, by different processes. The largest producers of this article, and in the opinion of the Committee the most important, manufacture it directly from galena. They oxidise the galena, sulphide of lead, by throwing small shovelfuls into a coke furnace heated to a very high temperature. The sulphide is volatilized and the vapour oxidized directly into sulphate. This is collected in chambers and then washed. The process of drying sulphate of lead pulp is identical with that in use for carbonate of lead, both by the old Dutch and by the chamber processes.

27. The Committee believe that there is not much danger attached to the production of sulphate of lead by this process. They are further of opinion that sulphate of lead is less poisonous to handle and to use than carbonate of lead. But from the evidence they have taken, and from their own observation, they are compelled to admit the superiority of the carbonate as a pigment, both in colour and in covering power. The manufacturers of sulphate of lead, so far as the Committee have seen, have not, as yet, been able to produce an article equal in opacity or whiteness to carbonate of lead made by the old Dutch process.

28. The Committee wish to direct attention to the evidence of Mr. A. P. Laurie, who has made a very careful study of the question of the manufacture of white lead and its substitutes. Although this expert is in substantial agreement with the conclusion of the Committee, as is shown in Nos. 6851, 6896, &c., still the Committee cannot pass over in silence his Answer No. 6864. It will be seen that he makes a recommendation in this passage, namely, that an experimental trial of the white lead substitutes should be instituted. The Committee think that the matter is much better left to be settled by competition in

the open market. With this exception, however, they endorse Mr. Laurie's remarks.

The price of sulphate is from 3*l.* to 4*l.* a ton under that of carbonate of lead made by the old Dutch process.

iii.—Substitutes for White Lead.

29. The Committee are directed to inquire "whether the alleged "injury to health caused by the existing processes can be diminished by "the adoption of any new processes in substitution for those ordinarily "in use."

They consider that certain processes, in the manufacture of carbonate of lead, are more carefully safeguarded and expose the operatives to less risk, in some works, than the corresponding processes in other works. But they have not taken it upon themselves to recommend that any particular process shall be forced upon all manufacturers. They would point out, for instance, that although they have strongly urged the advisability of the adoption of mechanical stoves, and have expressed a hope that such of the manufacturers as have not yet attempted their use will emulate the efforts of others to devise a mechanical means for the drying of pulp white lead, yet they do not feel that it would be a practical suggestion to ask the Government to insist on *all* manufacturers adopting a mechanical process for this purpose.

In the same manner they believe that sulphate of lead is less poisonous than carbonate of lead, and consequently that it is less dangerous to handle and to use. But they do not think it competent for them to recommend that all white lead makers should be obliged to make *only* sulphate of lead. This, again, they do not think would be a practical suggestion.

In the past a large amount of thought, labour, time, and money have been expended by many experts in the search for a substitute for carbonate of lead. Several compounds have been mentioned to the Committee as being equal to white lead and capable of taking its place, if only the prejudice of middlemen and dealers could be removed so as to secure for them a fair field in the paint market.

One of these compounds, and the one on which most stress has been laid, is oxide of zinc. This has been used with success for internal decoration, but for rough surfaces and for exposure to heat, cold, and rain, it does not possess the qualities for which white lead is conspicuous, namely, covering-power, and durability. Moreover, the price of oxide of zinc is greater than that of carbonate of lead.

With regard to all these so-called substitutes the Committee have invariably found that on closer inquiry of persons competent to judge and unprejudiced on either side, the substance in question was in some particulars inferior; and they have come to the conclusion that there is at present no substitute that can take the place of carbonate of lead made by the old Dutch process.

The Committee have felt this to be a serious difficulty. On the one hand there is the impossibility of efficiently replacing carbonate of lead made by the old Dutch process; on the other there is the fact that this process has been recognised to be attended with danger. The Committee, after careful deliberation, have come to the conclusion that the Dutch process might, by suitable precautions, be rendered sufficiently free from danger to warrant their recommending its continuance, guarded by such regulations as this inquiry has suggested; rather than its replacement by other processes which, though less dangerous, produce an article for which there is no constant demand, either at home or abroad.

iv.—Red and Orange Lead.

30. In dealing with the conditions under which the production of red lead is carried on, the Committee desire to point out that red lead works are frequently in direct local connection with white lead works, and that even where they exist separately, the nature of the manufacture calls for the application of special rules similar to those which apply to the manufacture of white lead.

31. It may be observed that orange lead is also largely manufactured in such works.

Orange lead is simply white lead heated in furnaces.

32. In the past, there have been no special rules applying to red lead works.

33. The Committee have found occasional cases of lead poisoning among the workers in this department, where the blue metal is melted and oxidised first into massicot and then red lead.

The Process.

34. Red lead proper is blue lead oxidised at a temperature at which the resulting oxides do not melt.

Pig lead is placed in a furnace, a large surface of which is exposed to heat and air. The metal, when melted, is not more than an inch or two thick on the bed. It is raked about by men using long rakes through a door, from which escapes a certain volume of lead fumes. These are caught by a draught chimney and carried away.

It is obvious, that the safety of the furnacemen depends largely on these draught chimneys, which should, therefore, be made efficient, both as regards size and draught.

Recommendations.

35. The Committee have found a widely-expressed opinion that when the charge is drawn in its first altered condition, viz., in the form of massicot, or, as it is sometimes called, casings, it should not be discharged on to the floor of the workshop, but should be shovelled, not raked, into waggons, before treatment in the second and final process. This recommendation applies to orange lead also.

36. They recommend that all packing in the shop where the manufacture of red or orange lead is actually carried on should be forbidden; and that the casks should be packed in some other place, provided with a hood connected with a fan or other suitable means to create an effective draught.

37. They further recommend that bath accommodation and lavatories be supplied by the manufacturers and be made one of the "Duties of Occupiers" in the Special Rules.

38. They also recommend the extension to red lead works of the Special Rules for white lead works, which enjoins the weekly visit by a doctor.

They also recommend that red lead workers be supplied with the prescribed drink.

39. And although the Committee in recommending the application of rules to red lead works are aware that in the latter the sources of danger are neither so numerous nor, perhaps, of such gravity as in the manufacture of white lead, yet from evidence they have received they feel compelled to recognise that there also exists in the manufacture of red lead a danger sufficient to justify the above recommendations.

v.—Litharge.

40. The production of litharge is considered by the Committee to be comparatively harmless, and they therefore submit no recommendations in reference thereto.

vi.—Colours.

41. In further reference to the subject of red lead, the Committee feel it their duty to notice certain varieties of red colour which are largely manufactured in some paint and colour works, as for instance, Milan red, Vermilionette, Persian red, &c.

Recommendations.

42. They have investigated closely the details of these manufactures, and although they have satisfied themselves that a certain amount of illness and discomfort results from the dusty nature of the work, they do not consider this class of manufacture to be within the same category as white and red lead works, and they conclude that the special rules which already exist as applicable to paint and colour works may be held to suffice in their application, with certain material additions which should require the use of respirators and overall suits wherever dust is generated: and the provision of proper baths in addition to the ordinary washing conveniences; and which, also, should render illegal the employment of any male young person or female in such manufactures.

vii.—Lead Smelting.

43. The Committee have not found that lead smelting is productive of much harm to the health of the workers. There are isolated cases of the milder forms of lead poisoning in this industry.

The Process.

44. The ore is treated in a furnace and the metal extracted from it. The same precaution is necessary in this operation as in the manufacture of red lead from pig lead, viz.; that of having the hood of the draught chimney to protrude far enough and to create sufficient draught to catch the fumes which escape from the door while the furnaceman is working.

45. The Committee have heard of occasional cases of poisoning among cattle and birds, &c., at some distance from a lead smelting works. These have been caused by the fumes which escape from the chimney.

Recommendations.

46. Several cases of lead poisoning having occurred after the cleaning of the flues in smelting works, the Committee recommend that for this work only adult men shall be employed; that respirators and overall suits shall be worn, and that no one be allowed to remain more than two hours in the flue at a time, and that everyone so employed be compelled to take a bath before leaving the works.

47. They also think it very necessary that the men employed in this work should be supplied with good lavatory accommodation, soap, towels, hot and cold water, &c.

viii.—Blue Lead.

The Extraction of Silver.

48. With regard to the working of blue lead and desilverizing, whether by the zinc precipitation or the Pattinson crystallisation process, the Committee do not consider the risk to be so considerable as to warrant them making any specific recommendation.

Lead Pipe and Sheet Making.

49. In the making of lead pipes, and the rolling of lead sheets, the Committeee have heard of isolated cases of lead poisoning, as they have in lead smelting. Cases of colic, wrist drop, and even death, are on record among workers in these branches of the trade.

50. But from all the facts and information they have been able to elicit of such cases, which have been exceedingly scanty, they do not feel they would be justified in making any recommendation on which either legislation or special rules could be based.

51. Ninety-nine men may work at these trades for years and never be affected, while the hundredth, with a predisposition towards lead poisoning may, after a short period of the employment, become a victim to plumbism.

The Committee, consequently, have come to the following conclusions:—

(*a*) That such cases are distinctly rare.

(*b*) That they are, so far as at present can be determined, capricious in their incidence, and they would suggest that any cases of lead poisoning from these industries coming under the notice of Her Majesty's Inspectors of Factories should be carefully noted, with a view to the accumulation of facts to form a basis for future action.

Bullet and Shot Making.

52. The Committee consider the processes of manufacturing bullets and shot, where reasonable care is taken, to be innocuous, and, consequently, to call for no interference on the part of the State.

Other Occupations productive of Plumbism.

53. With regard to other occupations which occasionally produce the symptoms of plumbism, such as plumbing, file-cutting, and house-painting, &c., the Committee have not considered the Reference of their Inquiry to include these trades, and they consequently make no Report upon them.

It is perhaps unnecessary to point out that, had they done so, the time in which they were desired to complete the work of this Inquiry would have been quite inadequate and must have necessarily been extended.

ix.—Yellow Lead.

The Process.

54. Severe cases of illness have been brought to the notice of the Committee from poisoning by yellow chromate of lead. This is a yellow dye, manufactured by several firms of dyers and colour merchants in England and Scotland. It is produced either by mixing solutions of bichromate of sodium or potassium with acetate or brown sugar of lead, or by acting with a solution of bichromate of sodium or potassium on carbonate of lead.

Recommendations.

55. The Committee wish to call attention to the very interesting evidence of Dr. Scott, and they think they cannot do better than recommend that the provisions which he suggests for prevention of the disease from this source should be made compulsory by special rules.

56. The Committee therefore recommend a more general use of fans, and that respirators and overall suits be supplied; that there be a sufficient supply of Epsom salts and the prescribed drink; and that lavatories furnished with the requisite articles and nail brushes be provided by the employers.

They may add that they have not traced any injurious effects to the use of these dyed articles when they have left the factory.

x.—Electric Accumulator Works.

57. The Committee are directed to inquire into the use of red lead in electric accumulator works, and to consider whether such works should be included in the special rules they have under their consideration. They visited works in Wolverhampton and London.

The Committee have found this trade, which, judged from the standpoint of most of our staple industries, must be said to be still in its infancy, to be conducted in a somewhat crude manner. They trust that ere long much that is now done by hand may be effectively performed by machinery.

The Process.

58. The process consists of rubbing red lead, which has been previously damped with dilute sulphuric acid, and has attained the consistency of clay, on to embossed or perforated leaden plates. The interstices of the plates are thus filled with red lead mud, so that when finished an even surface is produced.

This is done on both sides of the accumulator plate.

Other plates are similarly treated, litharge instead of red lead being employed.

One man mixes the dry red lead and dry litharge with dilute sulphuric acid, and in this part of the process a considerable amount of dust is produced.

Others rub the red lead or litharge, as the case may be, into the interstices of the plates. They do this with gloves on, using a sort of wooden spatula. But a good deal is rubbed on with the gloves. These latter are put to severe usage and do not last long, and, unless they are in good condition, let the material which is being manipulated through the seams or holes.

A glance at the hands of the worker, when he has taken off his gloves will at once show whether he has been working with red lead or litharge.

There are other modifications of this method, such as using a piece of lead with small arms branching from it which fits into a mould, and the red lead is put into the mould with it. It is rubbed in tightly with a roller or a small tool, and is put to dry on a tray over an argand burner for a few moments. The piece of metal with red lead adhering to it, in the shape imparted to it by the mould, will readily come away, and the mould can be used over again.

This cake of red lead may sometimes be surrounded by a piece of linen, and it may be mixed with finely chopped horse-hair to give it a firmer consistency. Another process is to make the red lead clay in the form of square biscuits. For this purpose a mould is also used.

In each of these processes it is necessary for the hands of the workers to be in almost continuous contact with the material used. In some cases gloves were not worn.

Recommendations.

59. The Committee recommend that the person who does the mixing should be obliged to wear a respirator and overall suit, and that all rubbers be obliged to wear gloves and aprons, to be supplied by the occupier, and that the gloves should be inspected constantly by the foreman, and renewed when defective; and that there be ample washing accommodation for all in the works, *i.e.*, lavatories with hot and cold water, soap and towels, supplied by the firm.

xi.—Enamelling of Iron Plates.

60. The Committee are directed to inquire into the dangers attending the trade of enamelling iron plates, and whether the special rules issued this year are sufficient.

The Process.

61. This industry consists of making enamelled signs and advertisements. The iron plate, having been cleaned, is first smeared with a little gum and water, and then a fine powder is sifted on to it. This powder may or may not contain lead. When it does contain it, the lead is usually in the proportion of about 25 per cent. The plate is then burnt in the furnace for several minutes, the powder melts, and constitutes the first coating of enamel. There is an alternate process in use at some works where the first coat is put on in the moist state with a ladle, the powder being suspended in water. The next process is that known as swilling. The colour, red, blue, brown, or white, as the case may be, which nearly always contains lead (the white is the only one which in some factories does not), is put on with a broad brush, such as is used in whitewashing; this is carefully laid on to secure an even surface, and is gone over again with a finer brush, and is finally smoothed with a dry camel's hair brush. This coating of the "colour" is allowed to dry on hot water pipes or in a stove, heated to a moderate temperature. Up to this point of the process the Committee do not consider much danger attaches to the industry. In the first process, where the powder which is sifted on contains lead, no doubt there must be some risk. In the swilling process the swiller does not touch the liquid except by accident, when he should at once wash and wipe his hands. In any case, being a vitrified compound suspended in water, its manipulation must be less dangerous than if it were dry powder. It is in the succeeding operation that most of the danger lies. The workers (women) place the stencil on the plate and rub off part of the enamel with a nailbrush. This comes off in a thick dust, and although they work on perforated tables the dust does not at once sink through the holes, but rises a little and lingers in the atmosphere before settling.

When all the superfluous colour has been rubbed off and the edges of the pattern are clear and sharp, the plate is fired in the furnace. If more than two colours are ordered the processes are repeated, viz.,

swilling, drying, stencilling, with its accompaniments of brushing and firing. This may sometimes be repeated eight or nine times, according to the number of colours required.

62. The compound of lead used in the manufacture of the enamels is chiefly red lead. The highest proportion of lead of which the Committee have heard is 33 per cent.; about 25 per cent. is usual. The method of manufacturing enamel is a trade secret.

Existing Special Rules.

63. The Special Rules are as follows :—

FACTORY AND WORKSHOP ACT, 1891.

SPECIAL RULES.

ENAMELLING OF IRON PLATES.

Duties of Occupiers.

They shall provide washing conveniences with a sufficient supply of hot and cold water, soap, nail brushes, and towels; and take measures to secure that every worker wash face and hands before meals and before leaving the works.

They shall provide suitable respirators, overalls, and head coverings for all workers employed in the processes of grinding, dusting, and brushing.

They shall adopt measures in the dusting process for the removal of all superfluous dust, either by the use of perforated benches and water tanks, or other efficient means.

They shall provide a sufficient supply of sulphuric acid drink or other approved sanitary drink, and shall cause the workpeople to take it.

Upon any person employed in the works complaining of being unwell, the occupier shall, with the least possible delay, and at his own expense, give an order upon a doctor for professional attendance and medicine. It is to be understood that this rule will not apply to persons suffering from complaints which have not been contracted in the process of manufacture.

No food shall be eaten in the works except in an apartment specially provided for the purpose.

As to Persons Employed.

Every person to whom is supplied a respirator or overall and head covering shall wear the same when at the work for which such are provided.

Every person shall carefully clean and wash hands and face before meals and before leaving the works.

No food shall be eaten in any part of the works except in an apartment specially provided for the purpose.

H.M. Chief Inspector of Factories.

Home Office, Whitehall, 1893.

64. It is too soon to say how far these have acted beneficially, but the Committee believe them to be good rules as far as they go.

Danger of Working.

65. The Committee find that illness from the stencilling process is common, and that it is sometimes very severe, having in several cases terminated fatally.

Recommendations.

66. The Committee recommend that a medical inspection of all the workers be insisted on at least once a month; that no girl under 20 be employed as a brusher, or in a room or workshop where any brushing takes place; that no female should be employed without previous examination, and a certificate from the medical attendant of the works certifying that she is of the required age and a person fit for the employment; and further that no employee who has been absent from work through illness should be re-employed without a medical certificate to the effect that he or she has recovered.

A rule adopted for this purpose should be incumbent on the employee equally with the employer, and it should be made clear that a worker attempting to evade it by seeking employment under an assumed name or otherwise would render himself, or herself, liable to a fine.

67. The Committee find that many of the girls employed at the enamel works walk long distances before beginning work, and that the nature of their occupation is such as to commonly deprive them of an appetite in the morning, and that consequently it is no rare thing for a girl, before tasting food, to have walked three miles and worked three hours in an atmosphere charged with lead dust.

It is impossible but that such a practice should be attended by the gravest danger, and, in order to guard against its continuance, the Committee recommend that the occupiers of all enamelling works do supply each female worker with a half-pint of milk and a biscuit before beginning work. The practice of giving the female workers milk at 11 o'clock already obtains in some of the enamelling establishments.

68. The third paragraph of the "Duties of Occupiers" in the above rules provides for the use of a perforated bench. The Committee recommend that these benches be supplied with fans, so that there may be a draught to carry the dust down through the apertures of the benches or tables. The under part of the latter must, of course, be boxed in.

69. The Committee feel that the logical continuation to the last paragraph in the Special Rules, both with regard to occupiers and to persons employed, is the provision of a dining room.

They therefore recommend that it be made one of the "Duties of Occupiers" to provide such an apartment, having a small ante-room furnished with pegs, where the operatives could hang up their clothes in which they do not work.

xii.—The Death of Harriet Walters.

70. The Committee are directed to investigate the circumstances under which Harriet Walters met with her death, 12th June last, at the age of 17.

Her History as an Enamel Worker.

71. She lived with her grandparents in rather poor circumstances at Sedgley. She entered the enamelling works of Messrs. Ralph and

Jordan at Bilston, at the age of 16, in 1892, working as a brusher, and was there for six months.

From the foregoing report it will be seen that the brushing department is the one where most danger exists in an enamelling works.

The distance between her home and the works at Bilston is about three miles, which distance the girl had to walk in all weathers; in addition to which she had to stand practically all day, stooping over the plate upon which she was engaged, and brushing off this deleterious powder.

In January 1893 she entered Messrs. Orme, Evans, and Company's works at Wolverhampton, where she also worked at brushing, the distance she had to walk to and from her work being about the same as in her previous employment. Here she worked up to 5th June, on which day she felt so ill that she asked the foreman to be allowed to go home. This she was permitted to do, and she accordingly walked back to Sedgley in company of a fellow worker.

On the 6th she was first seen by Mr. Ballenden, who attended her and prescribed for her until her death. This occurred rather suddenly on the 12th June. It seems that, although she never complained, she was actually laid up for three or four days while employed at Bilston, that she had constant headaches, and that her anæmic appearance dated from her first employment.

It also appears that, although reluctant to complain to her family, who were all along opposed to her employment in the enamelling trade, she did complain to her fellow workers before being taken ill on 5th June.

The Inquest.

72. At the coroner's inquest, held at Sedgley, the jury returned a verdict of death from chronic lead poisoning, accidentally contracted through her employment.

The Committee's Finding.

73. The Committee agree that she died of lead poisoning, but, as she was only seriously ill a week, they consider that her death was the result of an acute attack, acting on a constitution already enfeebled by long exposure to the influence of lead, and therefore probably contaminated by it. They further believe that her death was accelerated by a persistence in the practice before mentioned, viz., of walking from Sedgley to Wolverhampton, a distance of three miles, without having tasted food, and of then working till the dinner hour; for, although the employers provided milk at one time, the milk was discontinued when the special rules were issued necessitating a supply of acid drink. By this means the deceased got into a very low state of health, with great anæmia and constant want of appetite. The result was that, when attacked by lead poisoning, she had no reserve of health with which to resist it. Since the death of this girl the firm have recommenced the supply of milk at 11 a.m. It has been stated she was very poor and was half-starved. The Committee find that though the family were distinctly poor they never reached that pitch of poverty where there was an insufficiency of plain but nutritious food. There was always breakfast for her if she could have eaten it.

74. The Committee regret that on 5th June, when the foreman gave her leave of absence he did not comply with the special rules and give her an order upon a doctor for professional attendance and medicine.

Mr. Ballenden was sent for by her friends, although his charges were afterwards defrayed by the firm.

75. The Committee found that the respirator in use at the time of Harriet Walters' death was in reality a common handkerchief. It is probable that in the extreme heat of last May and June the younger and more inexperienced workers would take many opportunities of slipping these off.

76. At the adjourned inquest, which was held at Sedgley after the *post-mortem* examination, the medical evidence was given by Mr. Ballenden, who is assistant to his father, Dr. Ballenden, to whom the *post-mortem* examination was entrusted, and who was ill at the time.

It is to be regretted that the coroner did not postpone the further hearing of the evidence until Dr. Ballenden had so far recovered as to be able to attend.

The Committee do not wish to cast any slur upon Mr. Ballenden's ability or zeal, of which they have a high opinion; but, however conscientious and valuable may have been his evidence before the coroner's jury, it remains that, contrary not only to custom but to law, the cause of death was sworn to by an unqualified practitioner, and that the coroner and the jury acquiesced in this procedure.

The Committee trust that this may not recur.

xiii.—The Tinning and Enamelling of Iron Hollow-Ware.

77. The Committee are directed to inquire into the custom of tinning culinary utensils with a mixture of tin and lead; and also the enamelling of iron hollow-ware.

78. This industry of preparing kettles, saucepans, frying-pans, &c., is largely carried on at Wolverhampton, Bilston, Dudley, and the neighbourhood.

The Process.

79. The various pieces to compose the vessel or utensil are stamped or cut out of sheet iron, rivetted and fixed together. When the article is finished in the rough it is dipped into what is known as a "pit," containing a mixture of the metals with which it is to be coated. This mixture varies according to the class of goods turned out. Where what is known as "common tinning" is to be done, the mixture may contain 60 per cent. of lead to 40 per cent. of tin. In the higher class of goods the percentage of tin is increased and that of lead diminished. The vessel is merely dipped into this mixture of molten metals, having been previously cleaned with dilute hydrochloric acid and chloride of zinc.

80. The Committee find that the leading firms in the higher class of trade use no lead for culinary utensils. These firms use a small admixture of lead only where the vessel to be tinned is to be japanned also. Such vessels are generally slop-pails and coal-scuttles, baths, &c.

Effects of Working.

81. The Committee do not find the health of the workpeople employed in the maunfacture of any kind of iron hollow-ware to be much affected by their employment, though some isolated cases of slight lead poisoning have come to their ears. These cases are due, in their opinion to the negligence of the workers.

82. The Committee have not found that lead enters into the composition of enamel used for hollow-ware culinary utensils; therefore they do not think it necessary to make any special recommendation.

They may add that, although they have not traced any bad effects to the use of tinned culinary utensils, they do not see any reason why the suggestion of H.M. Chief Inspector of Factories, in his Minute of 4th April 1893 (*see* Appendix I.), viz., that the use of lead and arsenic in the enamelling and tinning of such goods for kitchen purposes be absolutely prohibited, should not be carried into force.

Recommendations.

83. The Committee recommend that the first clause in the special rules for the occupiers in the "Enamelling of Iron Plates," which provides washing conveniences with a sufficient supply of hot and cold water, soap, nail brushes, and towels, and enjoins that measures be taken to secure that every worker wash face and hands before meals and before leaving the works, be extended to "Tinning and Enamelling of Iron Hollow-Ware." They further recommend the extension of the last clause in those rules which prohibits the workers from eating food in any part of the works except in an apartment provided for the purpose; and that the additional clause suggested in No. 23, as applicable to the other trades, viz., that they should supply a dining-room, be extended to the tinners of iron hollow-ware.

xiv.—Remarks Applicable to all the Foregoing Trades.

Recommendations.

84. The Committee recommend that in all copies of special rules it be made manifest that it is incumbent on the employer to perform what is therein stated to be his duty, and that it is also incumbent on the employees to carry out the regulations laid down for their comfort and safety.

It is further necessary that it should be made clear that, for a breach of the rules, the contravener is liable to a fine, or in default to imprisonment; and that this applies to employer and employee equally.

In order that there may be no mistake the Committee recommend that every copy of all special rules be headed with the Royal Arms, and that the distinction between "Duties of Occupiers" and "As to Persons Employed" be abolished; "Duties of Persons Employed" being substituted for the latter heading.

There should be a clause at the end of the special rules stating that contravention of these rules involves a liability to a fine not exceeding 40*s*., or in default to imprisonment.

85. The Committee recommend that it be the duty of all occupiers to report to Her Majesty's Inspector of Factories and to the certifying surgeon for the district any case of lead poisoning, in the same way as they would at present report an accident.

It has been suggested that the medical attendant of the works should be appointed by the Government, but the Committee, in view of their recommendation that cases of lead poisoning should be reported to the certifying surgeon for the district, do not consider it necessary to change the existing system of these appointments.

XV. Summary of Recommendations.

86. *White Lead.* Paragraph

Recommendation	Paragraph
The institution of a medical examination previous to the employment of females	17
The requirement of a medical certificate after absence through illness, before re-employment, for both sexes	17
The prohibition of females under 20 years of age from employment	18
The requirement of a certificate of birth or baptism, or other proof of age, for females, before employment	18
The reduction of the price of such certificate to not more than 6*d.*	18
The abolition of female labour in all processes where there is direct contact with white lead, *i.e.*, white beds, rollers, wash-becks, stoves, and packing	19
The adoption of the overalls and head covering for females in the blue beds and all parts of the works	20
The provision of shoes and stockings for all females employed, and the enforced wearing of these during working hours	21
The provision of a hood connected with a fan for packing and storing dry white lead	22
The provision of a dining room	23
The provision of a stand-pipe or hose in the white beds	24

Red and Orange Lead.

Recommendation	Paragraph
The prohibition of the use of the rake in drawing charges of massicot, or of red lead, or of orange lead, from the furnace	35
The prohibition of such charges being drawn from the furnace on to the floor of the workshop or factory	35
The prohibition of packing massicot, red lead or orange lead, in the same place where its manufacture is carried on; and the provision of a hood, connected with a fan, for packing massicot, or orange or red lead	36
The provision of bath and lavatory accommodation, with a plentiful supply of hot and cold water, soap, nail brushes, and towels	37
The institution of a weekly medical inspection of all persons employed in such works	38
The provision of the prescribed drink	38

Colours.

Recommendation	Paragraph
The adoption of respirators and overalls wherever dust is generated	42
The provision of bath and lavatory accommodation, with a plentiful supply of hot and cold water, soap, nail brushes, and towels	42
The prohibition of any male young person or female in such works	42

Lead Smelting.

Recommendation	Paragraph
The prohibition of females and young persons from employment in cleaning the flues	46
The adoption of respirators and overalls for those employed in cleaning the flues	46

Paragraph

The prohibition of anyone working more than two hours in the flue at a time - - - - 46
The requirement that everyone employed in cleaning the flues must take a bath before leaving the works - - 46
The provision of bath and lavatory accommodation, with a plentiful supply of hot and cold water, soap, nail brushes, and towels - - - - 47

Yellow Lead.

The provision of fans - - - - 56
The adoption of respirators and overalls for all those engaged in dry processes; *e.g.*, carding yellow yarn, &c. - 56
The provision of an adequate supply of Epsom salts and the prescribed drink - - - - 56
The provision of bath and lavatory accommodation, with a plentiful supply of hot and cold water, soap, nail brushes, and towels - - - - 56

Electric Accumulator Works.

The adoption of the respirators and overalls for mixers - 59
The provision of gloves and aprons for rubbers - - 59
The provision of bath and lavatory accommodation, with a plentiful supply of hot and cold water, soap, nail brushes, and towels - - - - - 59

Enamelling of Iron Plates.

The institution of a medical inspection of all employees at least once a month - - - - 66
The prohibition of females under 20 years of age from employment in a brushing room - - - 66
The institution of a medical examination previous to the employment of females - - - - 66
The requirement of a medical certificate after absence through illness, before re-employment, for both sexes - 66
The provision of half a pint of milk and a biscuit for each female employed before beginning work - - 67
The provision of a fan to each perforated table or bench - 68
The provision of dining room and a cloak room - - 69

The Tinning and Enamelling of Iron Hollow Ware.

The provision of bath and lavatory accommodation, with a plentiful supply of hot and cold water, soap, nail brushes, and towels - - - - - 83
The requirement that everyone employed must wash face and hands before meals and before leaving the works - 83
The prohibition of taking any meal in any part of the works except in an apartment provided for the purpose - 83
The provision of a dining room - - - 83

To apply generally.

The substitution in all copies of Special Rules, for the words "As to Persons Employed," of the words "Duties of Persons Employed" - - - - 84
The extension to cases of lead poisoning of the same usage as obtains in cases of accidents, namely, a compulsory report to Her Majesty's Inspector of Factories and to the certifying surgeon for the district - - - 85

XVI.—Summary of Suggestions.

	Paragraph.
87. *White Lead.*	
The treatment of the washing water from the first tank below the rollers so as to render it free from acetate of lead in solution; *or* The prohibition of the immersion of the workpeople's hands into this liquid - - - - -	14
The provision of food for the operatives - - -	16
The postponement of the abolition of female labour in processes where there is contact with white lead until 1st January 1896 - - - -	19
The adoption of mechanical means for stacking, stripping, drying, and packing white lead - - -	19
The discontinuance of wearing gloves for manipulating white lead - - - - -	21
The adoption of the cambric, bag-shaped respirator -	21
The postponement of stripping white beds until they are "mature" - - - - -	25
Blue Lead.	
The careful observance of all cases of lead poisoning which come to the notice of Her Majesty's Inspectors of Factories, and which have arisen in lead pipe or sheet works, in order to accumulate sufficient data on which to base future recommendations - - -	51
The Tinning and Enamelling of Iron Hollow Ware.	
The prohibition of the use of lead and arsenic in the enamelling and tinning of hollow-ware for kitchen purposes - - - - -	82

Conclusion.

88. The Committee are aware that the enforcement of some of the recommendations they have made may appear to operate hardly upon the manufacturer. But they would point out that each of these reforms is actually in force in some works in the United Kingdom. The greatest change recommended by them is the exclusion of females from all direct contact with white lead. The Committee have seen four works where no women are employed in the white beds, in the stoves, or in packing. Judging from the experience they have had, they do not believe the number of women who would have to be replaced owing to this provision can be more than 600.

The Committee have noticed that the works in which the largest number of cases of lead poisoning have occurred are those where there has been least expenditure of money and care in precautionary measures for the health of the operatives.

The Committee do not think that the precautionary measures they have felt bound to recommend will press so heavily upon employers as to materially hamper them. But they are agreed that in an industry attended with so much risk to life and health as the white lead manufacture, the same precautionary measures must be taken by all classes of employers as an essential to their continuance.

In making the foregoing Report the Committee have all along borne in mind the paramount claim of the operative, on the one hand, to the protection of his health, and, on the other, the possibility that, by

making changes too sweeping, or by insisting on too extensive an expenditure of capital, they might damage and cripple the industry so as to drive it away from the country, and so cut off altogether a source of employment for the industrial classes. They are aware that if the manufacture of white lead were absolutely prohibited in the United Kingdom, scarcely a ton less would be used in these islands. The competition from abroad—both from America and the Continent—is very keen; but they hardly think that the alterations in, and the additions to, the Special Rules that they have suggested will materially hamper the manufacture, or unfairly handicap native enterprise; and it is to be remembered that their adoption will at all events serve to satisfy those responsible for the employment of workpeople in an industry otherwise so dangerous that that employment has been safeguarded by all the expedients which a prolonged and extensive Inquiry has brought to light. In the future, no doubt, practical experience may lead to further endeavours in this direction, but at the present stage of scientific knowledge the Committee believe that the measures they have proposed include every precaution that can be used in reason and with safety; and if these be accepted and loyally carried out by all concerned, they are of opinion that it will be long before any justification can arise for further interference on the part of the State in the management of these important industries.

89. The Committee desire to express their very cordial thanks and their sense of obligation to all those who have aided them in making this Inquiry.

All classes of persons interested in the inquiry, with a single exception, have extended to them, with a spontaneity and a courtesy deserving of the highest praise, the utmost kindness, frankness, and co-operation, and the Committee would take this opportunity of assuring the doctors, the manufacturers, the foremen, and the workers, of their gratitude.

90. Finally, the Committee desire to record, as the result of their experience, the fact that lead and all its compounds are in a greater or less degree poisonous, and that the handling or use of each or of all of them is attended by danger.

The Committee wish unanimously to express their high sense of the indefatigable zeal and activity which has been displayed by Mr. Tennant, who has acted as their Secretary throughout this Inquiry; as well as of the great pains and marked ability which have characterised his work in drawing up the Report.

(Signed) Edward Gould.
A. Dupré.
Thomas Oliver.
H. J. Cameron.
H. J. Tennant.

You have approved of the following Special Rules founded on their recommendations:—

Factory and Workshop Acts, 1878 to 1891.

xvii.—AMENDED SPECIAL RULES.

White Lead Works.

Duties of Occupiers.

They shall provide respirators, overall suits, and head coverings, to be worn by the persons employed in the departments enumerated below, under "Duties of Persons Employed."

They shall take care that every stack is fitted with a standpipe or moveable hose, and an adequate supply of water for damping the white bed before stripping.

They shall see that no female shall be employed without a certificate of fitness from a medical man.

They shall see that no person shall be re-employed after absence through illness without a certificate from a medical man.

They shall provide overalls and head coverings for females in blue beds, and in all parts of the works.

They shall provide shoes and stockings to be worn by all females during work.

They shall provide sufficient bath accommodation for all men and women employed.

They shall provide dressing-rooms, a dining-room, lavatories, and a cloak room in which the ordinary clothes of all workers are to be kept apart from their working clothes.

They shall arrange for a weekly visit by a doctor, who shall examine every worker individually, and who shall enter the result of each examination in the proper register.

They shall cause a register to be kept, and shall have entered in it the date when each worker commences and leaves employment, and the date when each worker takes a bath.

They shall cause every case of illness from lead-poisoning to be reported both to H.M. Inspector of Factories for the district, and to the certifying surgeon.

They shall cause each man or woman to take a bath at least once a week, and to wash in the lavatory before bathing.

They shall deliver to the persons employed the articles of clothing which are required to be worn, and they shall see that they are put on. At the end of every day's work they shall collect and have thoroughly washed all those which have been used in the stoves, and those which have been used in other departments, once a week.

They shall see that the general lavatory is thoroughly cleansed and supplied with clean towels after every meal.

They shall have the dressing-rooms, baths, and w.c.'s brushed and cleansed daily.

They shall not allow the workers to leave any clothes in the dining-room, or their ordinary clothes in any work-room.

They shall see that the supply of hot and cold water, soap, brushes, and towels is sufficient in the bath-room and lavatories.

They shall see that there are kept in close proximity to the workers in each department washing conveniences and a sufficient supply of approved sanitary drink, and they shall cause the people to take it.

They shall set apart, and cause to be entered in a notice affixed in each department, a period of at least 10 minutes, in addition to the regular meal-times, for washing immediately before each meal-time, and also before the end of the day's work; and they shall see that it is observed.

They shall see that at the doctor's weekly visit the proper entries are on each occasion made in the register.

Upon any person complaining of being unwell, they shall with the least possible delay give an order upon the doctor; and upon any person desiring medicine, they shall give a dose of the prescribed medicine kept at the works.

Managers, &c., shall report immediately to the firm any instance which comes under their notice of any worker neglecting the regulations hereinafter mentioned.

They shall examine all persons going out of the works, and shall not allow them to leave unless they are properly cleansed from lead.

Duties of Persons Employed.

Each man or woman before commencing work in any of the following departments shall wear as follows, having received the same from the person in charge:—

Blue beds and casting -	Every woman to wear head covering and overall suit.
White-bed - -	One overall suit and head covering. Women inside the white-beds to wear respirators also, but the "carriers" not.
Washing and crushing -	One overall suit and head covering. "Roller" women to wear respirators also.
Grinding - - -	One overall suit and head covering.
Setting stoves - -	One overall suit and head covering.
Drawing stoves - -	One overall suit, head covering, and respirator.
Paint mixing - -	One overall suit and respirator.

Each man or woman working at any white-bed, or in setting or drawing stoves, or in the washing and crushing, grinding, or paint mixing departments, before going to breakfast, dinner, or home, or before entering the dining-room for any purpose whatever, must—

Put off the overall suit, &c., and give the same to the person in charge, or leave it in the clothes room.

Brush every particle of lead dust from his or her clothes.

Thoroughly wash face and hands in the lavatory, and be particular that no dust remain underneath the finger nails.

If not wearing stockings and boots, thoroughly wash the feet.

Each man or woman must bathe at least once a week, and must wash in the lavatory before bathing.

Each man or woman must receive and drink, at such times as may be stated in a notice affixed in the factory, such sanitary drinks as may be prescribed in such notice.

Every woman must wear during work shoes and stockings provided by the occupier.

Every white-bed must be adequately watered on removal of the boards, and all trays of corrosions shall be well saturated with water before passing through the rollers.

No person shall smoke or use tobacco in any workplace, or room, or take food in any part of the works, except in the dining-room.

No person may seek employment under an assumed name, or under any false pretence.

Respirators - - -	A good respirator is a cambric bag with or without a thin flexible wire made to fit over the nose.
Sanitary drink suggested -	Sulphate of magnesia 2 oz. Water - - 1 gallon. Essence of lemon, sufficient to flavour.

Prescribed medicine.

The following Departments to be specially Ventilated.

(1.) Washing and crushing.
(2.) Grinding in water.
(3.) Paint (grinding in oil).
(4.) Drawing stoves.
(5.) No packing or storing to be carried on except under a hood connected with a fan or other mechanical means of carrying off dust.

R. E. Sprague Oram,
H.M. Chief Inspector of Factories.

Under section 9, Factory Act, 1891, any person who is bound to observe any special rules, as well as the occupier, is liable to penalties for non-compliance with such special rules.

Factory and Workshop Acts, 1878 to 1891.

SPECIAL RULES.

Red and Orange Lead Works.

Duties of Occupiers.

In drawing charges of massicot, or of red lead, or of orange lead, from the furnace they shall not allow the charges of massicot, or of red lead, or of orange lead, to be discharged on to the floor of the factory or workshop, but shall arrange that it be shovelled, not raked, into waggons.

They shall arrange that no red or orange lead shall be packed in the room or rooms where the manufacture is actually carried on.

They shall arrange that no red or orange lead shall be packed in casks or other receptacles except in a place provided with a hood connected with a fan or other suitable means to create an effective draught.

They shall provide sufficient bath accommodation for all persons employed, and lavatories, with a good supply of hot water, soap, nail brushes, and towels.

They shall arrange for a weekly visit by a medical man who shall examine every worker individually, and who shall enter the result of each examination in a register book to be provided by the said occupiers.

They shall provide a sufficient supply of approved sanitary drink for the workers.

Duties of Persons Employed.

In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows :—

" If any person who is bound to observe any special rules established or any factory or workshop under this Act, acts in contravention of, or fails to comply with, any such special rule, he shall be liable on summary conviction to a fine not exceeding two pounds."

R. E. Sprague Oram,
H.M. Chief Inspector of Factories.

FACTORY AND WORKSHOP ACTS, 1878 TO 1891.

SPECIAL RULES.

YELLOW LEAD.

Duties of Occupiers.

They shall provide washing conveniences, with a sufficient supply of hot and cold water, soap, nail brushes, and towels.

They shall provide respirators and overall suits for the persons employed in all dry processes.

They shall provide fans wherever dust is generated in the process of manufacture.

They shall provide a sufficient supply of Epsom Salts and of an approved sanitary drink.

Duties of Persons Employed.

In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows:—"If any "person who is bound to observe any special rules established for any "factory or workshop under this Act, acts in contravention of, or fails "to comply with, any such special rule, he shall be liable on summary "conviction to a fine not exceeding two pounds."

Respirators - -	A good respirator is a cambric bag with or without a thin flexible wire made to fit over the nose.
Sanitary drink suggested	Sulphate of magnesia - - 2 ozs. Water - - - 1 gallon. Essence of lemon sufficient to flavour.

R. E. SPRAGUE ORAM,
H.M. Chief Inspector of Factories.

FACTORY AND WORKSHOP ACTS, 1878 TO 1891.

SPECIAL RULES.

LEAD SMELTING WORKS.

Duties of Occupiers.

They shall provide respirators and overall suits for the use of all persons employed in cleaning the flues, and take means to see that the same are used.

They shall arrange that no person be allowed to remain at work more than two hours at a time in a flue.

They shall provide sufficient bath accommodation for all persons employed in cleaning the flues and every one so employed shall take a bath before leaving the works.

They shall provide washing conveniences with a sufficient supply of hot and cold water, soap, nail brushes and towels.

Duties of Persons Employed.

In cases where the co-operation of the workers is required for carrying out the foregoing rules and where such co-operation is not given, the workers shall be held liable, in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows :—

"If any person who is bound to observe any special rules established for any factory or workshop under this Act, acts in contravention of, or fails to comply with any such special rule, he shall be liable on summary conviction to a fine not exceeding two pounds."

R. E. Sprague Oram,
H.M. Chief Inspector of Factories.

Factory and Workshop Acts, 1878 to 1891.

SPECIAL RULES.

Electric Accumulator Works.

Duties of Occupiers.

They shall provide a bath and lavatory accommodation, with a plentiful supply of hot and cold water, soap, nail brushes, and towels.

They shall provide respirators and overall suits for all persons employed in the operation of mixing.

They shall provide gloves and aprons for all persons employed in the occupation of rubbing.

They shall see that the gloves are constantly inspected and renewed when defective.

Duties of Persons Employed.

In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows :—"If any " person who is bound to observe any special rules established for any " factory or workshop under this Act, acts in contravention of, or fails " to comply with, any such special rule, he shall be liable on summary " conviction to a fine not exceeding two pounds."

Respirators - - - A good respirator is a cambric bag with or without a thin flexible wire made to fit over the nose.

R. E. Sprague Oram,
H. M. Chief Inspector of Factories.

FACTORY AND WORKSHOP ACTS, 1878 TO 1891.

AMENDED SPECIAL RULES.

PROCESSES IN THE MANUFACTURE OF PAINTS, COLOURS, AND IN THE EXTRACTION OF ARSENIC.

Duties of Occupiers.

They shall provide washing conveniences with a sufficient supply of hot and cold water, soap, nail brushes, and towels; and take measures to secure that every worker wash face and hands before meals and before leaving the works; and, in addition to the above, sufficient bath accommodation for the use of all persons employed in the manufacture of Milan red, Vermilionette, or Persian red.

They shall provide suitable respirators and overall suits, kept in a cleanly state, for all workers engaged in any department where dry white lead or arsenic is used in either the manufacture or paint mixing, and overall suits for those engaged in grinding in water or oil, and for all workers in Milan red, Vermilionette, or Persian red, wherever dust is generated.

They shall provide a sufficient supply of approved sanitary drink, which shall be accessible to the workers at all times, and shall cause such approved sanitary drink to be taken daily by workers in any department where white lead or arsenic is used in the manufacture, and shall provide a supply of aperient medicine, which shall be given to the workers when required, free of charge.

No food shall be eaten in any part of the works where white lead or arsenic is used in the manufacture.

Duties of Persons Employed.

Every person to whom is supplied a respirator or overall suit shall wear the same when at the special work for which such are provided.

Every person shall carefully clean and wash hands and face before meals and before leaving the works.

No food shall be eaten in any part of the works in which white lead or arsenic is used in the manufacture.

No person shall smoke or use tobacco in any part of the works in which white lead or arsenic is used in the manufacture.

R. E. SPRAGUE ORAM,
H.M. Chief Inspector of Factories.

Under Section 9, Factory Act, 1891, any person who is bound to observe any special rules is liable to penalties for non-compliance with such special rules.

FACTORY AND WORKSHOP ACTS, 1878 TO 1891.

AMENDED SPECIAL RULES.

ENAMELLING OF IRON PLATES.

Duties of Occupiers.

They shall provide washing conveniences with a sufficient supply of hot and cold water, soap, nail brushes, and towels, and take measures to

secure that every worker wash face and hands before meals and before leaving the works.

They shall provide suitable respirators, overall suits, and head coverings for all workers employed in the processes of grinding, dusting, and brushing.

They shall adopt measures in the dusting and brushing processes for the removal of all superfluous dust, by the use of perforated benches or tables supplied with fans to carry the dust down through the apertures of such benches or tables, the under part of which must be boxed in.

They shall provide a sufficient supply of approved sanitary drink, and shall cause the workpeople to take it.

They shall arrange for a medical inspection of all persons employed, at least once a month.

They shall see that no female is employed without previous examination and a certificate of fitness from the medical attendant of the works.

They shall see that no person who has been absent from work through illness shall be re-employed without a medical certificate to the effect that he or she has recovered.

Upon any person employed in the works complaining of being unwell, the occupier shall, with the least possible delay, and at his own expense, give an order upon a doctor for professional attendance and medicine. It is to be understood that this rule will not apply to persons suffering from complaints which have not been contracted in the process of manufacture.

They shall provide a dining-room; and a cloak-room in which the operatives can hang up the clothes in which they do not work.

They shall see that no food is eaten in the works, except in the apartment specially provided for the purpose.

They shall provide for each female before the day's work begins some light refreshment, such as a half-pint of milk and a biscuit.

Duties of Persons Employed.

Every person to whom is supplied a respirator or overall and head covering shall wear the same when at the work for which such are provided.

Every person shall carefully clean and wash hands and face before meals and before leaving the works.

No food shall be eaten by any person in any part of the works except in the apartment specially provided for the purpose.

No person may seek employment under an assumed name or under any false pretence.

Respirators - - -	A good respirator is a cambric bag with or without a thin flexible wire made to fit over the nose.
Sanitary drink suggested	Sulphate of Magnesia - - 2 oz. Water - - - - - 1 gallon. Essence of Lemon, sufficient to flavour.

R. E. Sprague Oram,
H.M. Chief Inspector of Factories.

Under Section 9, Factory Act, 1891, any person who is bound to observe any special rules is liable to penalties for non-compliance with such special rules.

FACTORY AND WORKSHOP ACTS, 1878 TO 1891.

SPECIAL RULES.

THE TINNING AND ENAMELLING OF IRON HOLLOW WARE.

Duties of Occupiers.

They shall provide washing conveniences with a sufficient supply of hot and cold water, soap, nail brushes, and towels; and take measures to secure that every worker wash face and hands before meals and before leaving the works.

They shall provide a dining-room, and shall see that no food is eaten in the works except in such dining-room.

Duties of Persons Employed.

In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows:—" If any person " who is bound to observe any special rules established for any factory " or workshop under this Act acts in contravention of, or fails to " comply with, any such special rule, he shall be liable on summary " conviction to a fine not exceeding two pounds."

R. E. SPRAGUE ORAM,
H.M. Chief Inspector of Factories.

Enamelling of Iron Plates.

With reference to the Enamelling of Iron Plates, Mr. Knyvett, H.M. Inspector, remarks:—

"The principal question that has met with attention in this district during the past year, has been the dangerous nature of the iron enamelling industry. The Committee On White Lead Works, appointed by Mr. Asquith, will inform you on this point, with greater experience than I can offer, but with the recollection in my mind of the fatalities, and illness, which I have, now for many years, known to have resulted among female workers in works where iron tablets are enamelled, I am disposed to think that dusting process should be Scheduled as forbidden for women and young persons."

Mr. Hoare, H.M. Inspector, writes as follows:—

"*Special rules*—have been adopted in certain works, notably in the works for enamelling of wrought iron; these rules which are intended to benefit the actual worker are looked upon by them as a thing to be evaded. The real objections to obeying them are varied and amongst the women are described somewhat as follows: 'Overall suits are not ' smart and I dislike having to wash them. Head coverings are not ' attractive, they make me look like a servant, and hide my hair and ' fringe. Respirators prevent me talking and singing. I do not think ' it necessary to wash my hands so often. I like to eat my lunch whilst ' I am working. Acid drink is nasty and does not agree with me. ' The work has never disagreed with me, and I don't think it ever will. ' Washing my hands so often in cold weather makes them chap and ' sore."

"If one can credit employers they find it absolutely necessary to keep some one continually seeing that operatives obey these rules.'

Mr. Sedgwick, H.M. Inspector, observes :—

"In the manufacture of Enamelled Iron Plates, there is only one such Factory in this district; I have made several surprise visits. The firm has supplied Head-dress, Overalls, Respirators, Hot and cold water, Soap, Nail brushes, &c., and keep a supply of specially prepared drink for the workers. There is also a good supply of milk, yet the last time I visited I found the females neglecting to use the respirators provided, and with open mouth and nostrils proceeding with their work. The manager informed me that he was continually insisting upon the use of respirators, or other covering, for the mouth and nose, but as soon as his back was turned these were dispensed with, more or less. I called the female workers into the office, and having explained the dangerous nature of the employment and the use of the articles provided for their protection, I informed them that if at a future visit, I found a continuance of these contraventions of the Special Rules, I should advise the workers be prosecuted."

"At a recent visit to the Bloomfield Iron Works, Tipton (Messrs. W. Barrows & Sons), I observed an ingenious contrivance for restricting the heat arising from the front of puddling furnaces. A length of ordinary gas-piping runs along the upper part of the front of the furnace; perforations about half an inch apart are made in this pipe, and through which a row of jets of cold water play upon a sheet-iron plate. This plate covers the puddling door, the water is supplied from the canal by the engine-pump; when the sheet is drawn in front of the puddling door the water runs down it, keeping it always cool. The water is received into a gutter formed at the bottom of the sheet, and from thence is conducted to the back of the flue-plate, and, it is said, preserves the "Fettleing," from this it runs to the puddler's ash-hole, and so cools the ashes there, becoming nearly absorbed by the various processes mentioned. When using the furnace the puddler turns off the water, then slides the sheet along a rod, leaving the mouth of the furnace clear for work. In the opinion of the men employed, by this contrivance their position at the front of the furnace is kept cool, and their labour made both healthier and pleasanter. It originated with the manager of the works, Mr. L. Sheridan."

xviii.—*Chemical Works.*

Your attention having been drawn to the dangers of life and health of the workpeople employed in chemical works, you appointed a committee consisting of Her Majesty's Chief Inspector of Alkali Works, the Regius Professor of Medical Jurisprudence, University of Glasgow, the Certifying Surgeon of the Widnes District, and representatives of the Factory Department, with Mr. H. S. Richmond, Her Majesty's Inspector of Factories, as Secretary. The Committee held sittings in different places to receive evidence from employers and workmen especially directing their attention to Alkali Works and the manufacture of Bichromate and Chromium compounds. The result of their exhaustive enquiry will be found in the following report in which they have recommended means to abate the injurious effects of the manufacture, and suggested special regulations to protect vats and other dangerous places and utensils used in the manufacture.

REPORT OF THE COMMITTEE APPOINTED TO INQUIRE INTO THE DANGERS TO LIFE, LIMB, AND HEALTH ATTENDING EMPLOYMENT IN CHEMICAL WORKS.

To the Right Honourable HERBERT HENRY ASQUITH, Q.C., M.P., Her Majesty's Principal Secretary of State for the Home Department.

SIR, October 1893.

THE undersigned, forming the Committee appointed to make inquiry into the conditions of labour in chemical works, with a view to discover—

(1.) "How far the manufactures, as at present carried on therein, injuriously affect the health of the workpeople; and how far the injurious effects depend upon the age and sex of the operatives;"

(2.) "What means can be adopted to abate the injurious effects of the manufacture;"

(3.) "What special regulations should be adopted to protect vats and other dangerous places and utensils used in the manufacture;"

have the honour to report as follows:

The Committee held sittings at Liverpool (for St. Helens and Widnes), at Glasgow, at Newcastle, at Chester (for Flint and Northwich), and in London. They also personally visited a number of works at and in the neighbourhood of these places.

At a meeting held at Liverpool the Committee had the advantage of a conference with the chairman and three district managers of the United Alkali Co., with whom they carefully went into the subject of the proposed special rules, with the result that practically a unanimous agreement was arrived at as far as they concern that company. It will be seen that some additions and some alterations were made.

The Committee had a number of workmen before them, at a meeting at Liverpool, to give evidence, and also examined many others at the different works visited by them.

The Committee desire to record their thanks for the ready assistance granted to them in the course of their inquiries by employers, more especially by those connected with the United Alkali Co., Messrs. Brunner, Mond, and Co., the Oldbury Alkali Co., and the London Chamber of Commerce; also to the numerous operatives, from whom they obtained much valuable information.

In accordance with your instructions, the Committee have directed their inquiries both generally as regards all classes of chemical works, and also with special reference to alkali works and the manufacture of bichromate and chromium compounds.

ALKALI WORKS.

The Committee visited a large number of works, and made most careful inquiry into the chief departments, viz.:—

(1.) *Bleaching Powder Department.*

This department is undoubtedly by far the most trying of all to those employed in chemical works, owing to the explosure of chlorine gas, under the system which generally prevails at present. In the "Weldon" chambers, which are most commonly used, a thick layer of lime, 4 to 6 inches, is spread on the floor. The chambers are then closed, and strong chlorine gas is turned on, which is absorbed by the lime. At the end of

about four days the gas is turned off, the free gas in the chamber is either drawn off by an exhaust or absorbed by a lime distributor, and the doors are opened. The men, about two hours afterwards, enter to pack the powder. As soon as the powder is disturbed by the shovel it gives off chlorine gas, and no man could work in the chamber without some form of respirator. The packers, in order to be able to work in the chambers, wear a respirator, commonly called a "muzzle." This consists of about 30 folds of flannel, damped and tied tightly over the mouth, with the nostrils free and resting on it. The men are obliged to inhale through the muzzle and exhale by means of the nostrils, otherwise they would be "gassed." The exertion of breathing through the thick folds of flannel shows itself by the red and puffed state of the men's faces, and profuse perspiration on coming out of the chambers, which they are obliged to do at intervals during their work. Some, but by no means all, wear "goggles" to save the eyes from the lime dust. None but strong healthy men could stand the work. Those liable to bronchitis would quickly feel the effects of the gas, which has a tendency to produce bronchial inflammation. In another process of making bleaching powder, the "Deacon" chambers are used. In these chambers the lime is put in thin layers on a series of trays, one above the other; the chambers are closed, and dilute chlorine gas, containing only about 5 per cent. of chlorine, is turned on. When the chambers are opened the the packers work from the outside, and the bleaching powder falls through a hopper into barrels below. Though exposed to some gas, the packers at the Deacon chambers can use a very much smaller "muzzle," which is therefore not nearly so trying. In addition to these, mechanical means have been tried for the manufacture of bleaching powder which would obviate all exposure to the gas. The Hasenclever process, by mechanical means, of which a specification is appended, is said to be now successfully used in Germany. Messrs. Brunner, Mond, & Co. are erecting a somewhat similar plant of their own for the manufacture of bleaching powder which will shortly be completed, whilst a description is also appended of a patent automatic continuous producing chamber, invented by Messrs. J. M. and A. Milnes. The Committee cannot but express a strong hope that the old process may shortly be abolished for some mechanical process. Meanwhile they have suggested certain special rules to obviate in some degree the escape of gas for the benefit of those working in and around the chambers.

The Committee are bound to add that the packers themselves do not as a rule complain, although some of them have been employed in this occupation for many years, being tempted no doubt by the short hours and high rate of pay. But complaints have reached the Committee from those whose work takes them near the chambers; many of these complain of the effects of the chlorine gas on their health.

(2.) *Salt Cake (Sulphate of Soda) Department.*

In this department those employed are more or less exposed to the escape of hydrochloric acid gas. Many of the men have had their teeth entirely destroyed by its effects, but this seems attributable to the use of a rag or "bite" between the teeth. The hours of work in this department are long, consisting of two turns of 11 and 13 hours each. The Committee, from their inquiries, are convinced that with increased care a great deal of the escape of gas here might be prevented.

(3.) *Vitriol Department.*

The hours is this department are very long, amounting to an attendance of 84 per week, though the actual work is not continuous. If the

plant is bad, either chambers, towers, or pipes, those employed may be exposed to sulphurous gas and nitrous fumes, but with care and due observance of rules laid down under the Alkali Act these should be prevented.

(4.) *Caustic Soda Department.*

In this department those employed are not subject to fumes or gas, but danger arises from splashing of the liquor and from the construction of the caustic pots themselves. The Committee have proposed special rules as to the construction of the pots, and the supplying of syringes for treating injuries to the eyes.

(5.) *Chlorate Department.*

The danger here is from explosion or from clothing becoming impregnated with chlorate dust and catching fire. The Committee recommend the use of overalls in the grinding rooms, the use of some such lubricant as tallow instead of oil, ventilating cowls in the roof, electric lighting where practicable, and baths kept ready for use.

(6.) *Black Ash Department.*

The danger here is from the unfenced gangways across the vats. The Committee recommend that either the vats be covered or the gangways fenced.

HOURS OF LABOUR.

In the course of their inquiries the Committee have been impressed by the long hours of work which prevail in some departments of alkali works.

In the vitriol department these amount for burner men to an actual average attendance at the works of 84 hours per week, whilst in the salt cake departments the men are accustomed to work two shifts of 13 and 11 hours respectively. The Committee would strongly advise the adoption of eight-hour shifts, which have already been successfully tried in some departments at some of the works of the United Alkali Co., whilst at the works of Messrs. Brunner, Mond, and Co. eight-hour shifts prevail throughout. The Committee are indebted to Messrs, Brunner, Bond, and Co., for some very interesting facts as to the improvement of the men's health since the eight-hour shifts were adopted. These figures connected with their sick club, show that during the summer quarter in 1889, before the introduction of three shifts, the per-centage of those who received sick pay was 7·1, whilst during the same quarter of 1893, after the introduction, the percentage was only 5·1, or a reduction of 28·32. In 1889 the men attended by the doctor equalled 10·12 per cent., but in 1893 only 5·1 per-cent., or a reduction of 49·6. Messrs. Brunner, Mond, and Co. wished to draw particular attention to the great reduction in those who received doctor's attendance, which means stopping away from work one or two days without actually being laid up for the week, as in their club only men absent for a week receive sick pay.

Messrs. Brunner, Mond, and Co. add that the cost of wages paid per ton of alkali produced by them is now no more than it was four years ago, in spite of the fact that the men employed on shift work are paid the same wages for eight hours as they were formerly paid for twelve. This improvement they attribute to partly to improvements in the apparatus used, effected at considerable cost, and partly to the increased efficiency of the men due to their better health and spirits.

Bichromate of Potash or Soda.

This manufacture is practically in the hands of three firms at Glasgow, Rutherglen, and Falkirk, all of which works were visited by the Committee.

The Committee found that almost all the men working where dust was prevalent, more especially between the furnaces and the dissolving tanks, had either perforation of the septum of the nose, or had lost the septum altogether.

Many of those employed suffer also from what are technically called "Chrome holes" on hands and arms. These are caused by dust or liquor acting on broken skin, or by the handling of crystals.

The proc ss is as follows:

Chrome ore is ground by machinery. A great deal of dust prevails in the grinding rooms, and the use of some form of respirator is advisable though this dust is only harmful mechanically.

The ground ore is put into hot furnaces with carbonate of potash, or soda, and lime, and comes out in form of cake. This cake is often placed on the floor and allowed to cool before being put into the tanks. When cool, a great deal of deleterious dust arises from throwing it into the tanks. This harmful dust might to a great extent, in the opinion of the Committee, be obviated by throwing the cake into the tanks at once, instead of leaving it to cool and form dust.

The cake when placed in the tanks is treated with water and the chromate of soda or potash dissolved out. The solution of yellow chromate is then treated with sulphuric acid, and bichromate is thus formed. This solution is evaporated, and the crystals are obtained.

The Committee strongly recommend the use of respirators where any dust arises, and the use of gloves where crystals have to be handled. Sufficient suitable lavatory accommodation and appliances should also be provided.

The Committee are of opinion that the due observance of cleanliness on the part of the operatives would largely conduce to the prevention of the evils referred to.

Chemical Works in General.

As regards the question as to how far the injurious effects depend upon the age and sex of the operatives, the Committee find no females are employed in alkali works, and but few boys under 18 years, except in cooperages, plumbers' shops, box-making, &c. Moreover, their inquiries do not lead them to suppose that exceptional mortality, apart from accidents, exists in them.

On this head, the Committee append certain statistics supplied to them in connexion with the Tyne and Scotch districts, and the Globe Alkali Works at St. Helens. Statistics are also appended with regard to number of men employed, hours of labour, and wages.

The evidence obtained from workmen in the various departments of alkali works is given in the Appendix.

In conclusion, the Committee believe that great good will ensue from the adoption of the proposed rules; and they strongly recommend that these be issued as soon as possible, looking at the unfortunate omission

in the Factory Act of 1891, whereby all obligation to fence dangerous pots, pans, &c., was rescinded.

We have the honour to be,
Sir,
Your most obedient Servants,
WM. DAWKINS CRAMP,
H.M. Superintending Inspector of Factories,
Chairman.
ALFRED E. FLETCHER,
H.M. Chief Inspector under the Alkali, &c.
Works Regulation Act.
P. A. SIMPSON, M.A. Cantab., M.D.,
Regius Professor of Medical Jurisprudence,
University of Glasgow.
D. J. O'NEIL, M.B., C.M.,
Certifying Surgeon, Widnes District.
H. S. RICHMOND,
H.M. Inspector of Factories,
Secretary.

MEDICAL REPORT.

BLEACHING POWDER WORKS.

The men employed in the manufacture of bleaching powder are exposed to the following evils; viz:—

The inhalation of—

(1.) Chlorine gas.

(2.) Chloride of lime in the form of dust (bleaching powder).

The effects may be the following—

(1.) Irritation of the lining membrane of the windpipe and bronchial tubes, leading to bronchitis or asthma (or both combined), accompanied by severe cough and profuse expectoration.

(2.) The prolonged irritation may give rise to disease of the lung substance, running on in some cases to a form of consumption.

(3.) Inflammation of the superficial membrane of the eyes (conjunctivitis).

With a view of lessening the foregoing ill effects we would suggest—

(1.) Free and thorough ventilation in and about the bleach chambers.

(2.) Oiling or greasing of the exposed parts of the body before commencing work, the wearing of "goggles," and the introduction at intervals of a few drops of castor oil into the eyes, for their protection.

(3.) Having made various experiments with different chemicals in the hope of increasing the efficiency of the so called "muzzles," or respirators now in use, we would suggest the following method:—

Let the respirators be moistened from time to time with a solution of sulphite of soda. The chlorine gas coming in contract with the sulphite of soda, the latter is converted into sulphate of soda, while the chlorine now appears as hydrochloric acid. The latter, being

readily absorbed by water, is held in the moist respirator, whereas chlorine gas, which is only sparingly soluble in water, passes to a considerable extent through the respirators as at present used.

Were this suggestion carried out, the respirator or "muzzle" might be made much thinner than at present. In this way the heat would be lessened, and the men would be able to breathe with greater freedom and safety.

Workers in Chrome Compounds.

The evil effects upon these workers are due to chromic acid combined either with potash, soda, or lime. The lining membrane of the nostrils almost invariably suffers. Irritation of the membrane is followed by ulceration, leading ultimately to perforation or complete destruction of the nasal septum.

These results cause in many cases partial or complete loss of the sense of smell. Similar irritation and ulceration take place in the throat, windpipe, and bronchial tubes.

The foregoing conditions are due to the inhalation of the corrosive dust which is freely given off in various stages of the manufacture of chrome compounds.

Another effect is the production of ulcers, termed "chrome holes," in various exposed parts of the body, due to the deposit of chrome dust. These ulcers are remarkable for their depth, and for their slowness in healing.

After experimenting with various chemicals, with the view of lessening the evils caused by the inhalation of chrome dust, we would suggest the adoption of the following method. Let the sponge or other absorbent material of the respirator be moistened with a solution of bismuth (such as the liquor bismuthi of the British Pharmacopœia). The chrome dust coming in contact with this is decomposed, an insoluble compound of bismuth and chromic acid being formed.

The same result might be obtained, so far as the nose is concerned, by plugging the nostrils with cotton wool, previously soaked in the bismuth solution.

It may here be mentioned that solutions of bismuth, so far from irritating, have a decidedly soothing effect.

The cleansing of the exposed parts of the body by frequent ablution, and the protection of the hands by waterproof gloves in those who manipulate the chrome products, afford, in our opinion, the best means of preventing the evil effects which we have described. Lavatories should be freely accessible to the operatives in all such works.

Sulphuretted Hydrogen Gas.

As workers are occasionally suddenly overpowered by breathing this gas, a speedy rescue is imperative. For this purpose a fellow workman, attempting the rescue, should use a respirator charged with moist oxide of iron. In order to restore consciousness, a supply of oxygen gas in a compressed form should be at hand.

P. A. Simpson, M.B., Cantab., M.B.
Regius Professor of Medical Jurisprudence,
University of Glasgow.
D. J. O'Neil, M.B., C.M.,
Certifying Surgeon, Widnes District.

SPECIAL RULES.

I. In future every uncovered pot, pan, or other structure, containing liquid of a dangerous character, shall be so constructed as to be at least 3 feet in height above the ground or platform. Those already in existence which are less than 3 feet in height, or in cases where it is proved to the satisfaction of an inspector that a height of 3 feet is impracticable, shall be securely fenced.

II. There shall be a clear space round such pots, pans, or other structures, or where any junction exists a barrier shall be so placed as to prevent passage.

III. Caustic pots shall be of such construction that there shall be no footing on the top or sides of the brickwork, and dome-shaped lids shall be used where possible.

IV. No unfenced planks or gangways shall be placed across pots, pans, or other structures containing liquid of a dangerous character. This rule shall not apply to black ash vats where the vats themselves are otherwise securely fenced.

V. Suitable respirators shall be provided for the use of the workers in places where poisonous gases or injurious dust may be inhaled.

VI. The lighting of all dangerous places shall be made thoroughly efficient.

VII. Every place where caustic soda or caustic potash is manufactured shall be supplied with syringes or wash bottles, which shall be enclosured in covered boxes fixed in convenient places, in the proportion of one to every four caustic pots. They shall be of suitable form and size, and be kept full of clean water. Similar appliances shall be provided wherever, in the opinion of an inspector, they may be desirable.

VIII. Overalls, kept in a cleanly state, shall be provided for all workers in any room where chlorate of potash or other chlorate is ground. In every such room a bath shall be kept ready for immediate use.

In every chlorate mill, tallow, or other solid lubricant shall be used instead of oil.

IX. Respirators charged with moist oxide of iron or other suitable substance, shall be kept in accessible places, ready for use in cases of emergency arising from sulphuretted hydrogen or other poisonous gases.

X. In salt cake departments suitable measures shall be adopted by maintaining a proper draught, and by other means, to obviate the escape of low-level gases.

XI. Bleaching powder chambers, after the free gas has, as far as may be practicable, been drawn off or absorbed by fresh lime, shall, before being opened, be tested by the standard recognised under the Alkali Act. Such tests shall be duly entered in a register kept for the purpose, which shall be produced to an inspector whenever called for.

All chambers shall be ventilated, as far as possible, when packing is being carried on, by means of open doors on opposite sides and openings in the roof so as to allow of a free current of air.

XII. In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows :—" If any

" person who is bound to observe any special rules established for " any factory or workshop under this Act, acts in contravention of, or " fails to comply with, any such special rule, he shall be liable on " summary conviction to a fine not exceeding two pounds."

SPECIAL RULES.

Bichromate Works.

I. In future every uncovered pot, pan, or other structure containing liquid of a dangerous character, shall be so constructed as to be at least 3 feet in height above the ground or platform. Those already in existence, which are less than 3 feet in height, or in cases where it is proved to the satisfaction of an inspector that a height of 3 feet is impracticable, shall be securely fenced.

II. There shall be a clear space round such pots, pans, or other structures, or where any junction exists a barrier shall be so placed as to prevent passage.

III. No unfenced planks or gangways shall be placed across pots, pans, or other structures containing liquid of a dangerous character.

IV. Respirators suitable for protection of nostrils and mouth shall be provided where injurious dust or noxious fumes may be inhaled.

V. The lighting of all dangerous places shall be made thoroughly efficient.

VI. Inasmuch as dust is the principal cause of the various evil results to workers in chromium compounds, all due means shall be taken to limit in every way the formation of dust.

VII. Gloves of some waterproof material shall be provided for the use of workers who handle the crystals.

VIII. Sufficient lavatory accommodation, with hot and cold water, soap, nail brushes, and towels, shall be provided.

IX. In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows:—" If any " person, who is bound to observe any special rules established for any " factory or workshop under this Act, acts in contravention of, or fails " to comply with, any such special rule, he shall be liable on summary " conviction to a fine not exceeding two pounds."

APPENDIX.

The Chemical Committee sitting for the Examination of Witnesses held at the North-Western Hotel, Liverpool.

Friday, July 28th, 1893.

PRESENT:

W. Dawkins Cramp, Esq., in the Chair.

Professor Simpson. A. E. Fletcher, Esq., Alkali Inspector.	Dr. O'Neil, of Widnes.

H. S. Richmond, Esq., H.M. Inspector of Factories (*Secretary*).

John Beetle examined by Mr. Richmond.

J. Beetle. 1. Where do you work?—At the Globe Alkali Works, St. Helens.

2. What department do you work in?—In the bleaching powder.

J. Beetle.

3. How long have you worked there?—In the yard or in the bleach?

4. In the chemical works altogether?—I have worked about 12 years in the Globe Alkali.

5. All that time in the bleaching powder?—No, sir; about five years in the bleaching powder and about two years in the lime-house.

6. (*Mr. Fletcher.*) You have spoken of bleaching powder and lime dressing; which of those occupations do you find most distressing and troublesome and difficult for you?—Well, I used to discharge waggons at first when I went to the Globe.

7. That is not what I mean; which do you like least, working in the bleach chamber or in the lime shed?—I like the bleach the best.

8. And which the worst?—Well just the bare spade job. I had to work for 4*s.* a day emptying waggons.

9. What I want to come at is this, is lime dressing very distressing?—No, sir.

10. Does not it hurt your face at all—the lime dust?—If you let the lime dust stop on your face when you are sweating it will burn, but if you are not sweating very much, it will not affect you. If the sweat lies on your face it will burn you.

11. What do you do to prevent it hurting your face?—The lime? Sometimes I rub a little bit of tallow on it.

12. Did you ever find putting a cloth or respirator over the mouth to be of use?—Oh, yes, sir; they put a muzzle over the mouth to keep the dust out.

13. The same muzzle that you wear in the bleaching powder?—They do not need as much as us, only to keep the dust out.

14. You wear bigger muzzles in the bleach?—Yes, sir.

15. It is simply to keep the dust out in the lime house.

16. (*Dr. O'Neil.*) If this tallow which you put on afterwards were put on before would it prevent it?—Yes, you put a little on before you go into the chamber, because when you sweat and the dust gets on you it will stick there, and either lime or bleach will burn if it sticks on your skin.

17. (*Mr. Fletcher.*) Then you think if you have grease on your skin and a cloth over your mouth, you are sufficiently protected?—There is no great hardship.

18. You cannot propose anything which could be better?—No, flannel is the best; I have never tried anything else myself.

19. You would not care about a respirator made of metal or india-rubber?—No, sir; I think the flannel is very good for us. I am better since I went to the bleach, increasing in health myself. I am fatter now than ever I was since I went to the bleaching powder. It does not do me any harm. Certainly you must get a little bit of gas sometimes. Your flannel may be a little dry sometimes or a little wet, and you have a little gas to contend with, but you can keep it out, not to do you any bodily harm. I am a lot healthier than I was before I went to it.

20. (*Mr. Richmond.*) Of course in the bleach-house you wear a muzzle to keep out the fumes?—Yes, sir.

21. And in the lime to keep out the dust?—The lime dust, yes.

22. You have worked at bleach and at lime and at the ordinary labour work of the yard, and you would rather work at the bleach, considering the pay and all its conditions, than any other branch.

23. In spite of the chlorine gas?—Oh, yes, sir.

24. You do not count that much?—Oh, no. What little we get does not do us any harm. Your flannel gets a little dry sometimes, or a little wet, and you cannot get your breath through it, and you have to come out and change it.

25. Do you wash that flannel often?—Yes, sir; once a day.

26. Is the same flannel used against the fumes and against the lime?—Yes, you can use the same flannel. Some people use a bit of spun yarn in the mouth, but that causes them to have bad teeth.

J. Beetle.

27. You are speaking now of the lime, not the bleach?—Oh, you could not do it with the bleach; you have to draw your breath through your flannel, and blow it out through your nose; that is how we get our breath.

28. (*Mr. Richmond.*) You have your bleach muzzle here I believe, and can show it?—Yes, sir; shall I put it on?

29. Yes, you had better show us how it does go on?—This (*illustrating*) is the way we use them.

30. So that you draw your breath through the flannel, and exhale through your nostrils?—Yes, you never cover your nose.

31. What sort of muzzle do you put on for the lime dressing?—Some people do not use one, they get a bit of spun yarn in the mouth, but I would have a muzzle about half as big as this, just to keep the dust out.

32. But you might in the lime-house have a very much less unwieldy respirator than that; a piece of sponge tied with a string over your mouth would be better than that?—Some people, as I said, have a piece of spun yarn.

33. I said a piece of damp sponge the size of your hand, to put over your nostrils like that?—But you must not have anything over your nostrils.

34. (*Mr. Fletcher.*) How many folds of flannel have you there?—Somewhere about 30 odd.

35. And you wash it every day?—Yes, sir; wash it in soap and water.

36. (*Mr. Richmond.*) And you buy that yourself?—Yes, sir.

37. And you take it home and wash it?—Yes, sir. They find us the bags or covers, and strings.

38. They are found you by the company?—Yes, sir; the strings and bags. We find the flannel ourselves. Sometimes these may be a little too spongy, or a little too dry. If so all you have to do is to come out, take it off, and damp it a little, and then you are all right. In working bleach there must be a little gas. You cannot help getting a little sometimes, but not to do you any bodily harm.

39. Not sufficient to affect you, you think?—No, I have had better health since I went to it than I had before. I can eat well, and everything.

40. (*Chairman.*) How many hours a day do you work in the bleach?—It varies. Sometimes we have only one chamber a day to do, and sometimes two. Just when the foreman can get the bleach ready we have to pack. Some days we have nothing to do. Such days as we have two, that is 33 tons to each of us, and that runs us 22*s.* apiece. It is a two chamber day to-day.

41. How long does that take you?—To-day it would be about five hours wearing the muzzle. We would be there longer, but all our work is when we have to put the muzzle on and go into the chamber. We have nothing to do besides, and we can sit down as we want.

42. (*Dr. O'Neil.*) How long can you wear that muzzle at a time?—About an hour. We do half a chamber, have a rest, and then go back and finish the other half. We have $2\frac{1}{2}$ hours only with one chamber, and 5 hours with two, but as I said, some days we get none.

43. Do you mean that you would wear that muzzle as long as $2\frac{1}{2}$ hours at a stretch?—In winter I could do it; but in summer it takes an hour and, say, ten minutes to get half a chamber out, and then we go out and have a sit down, and then go and get the other half out. It takes $2\frac{1}{2}$ hours for one chamber and 5 hours when we have two. We do not work more than about 5 hours a day, and that is a big day.

44. (*Chairman.*) Have you ever suffered from being gassed?—No, sir.

45. Not at all?—I have had a little gas, but not to do me any harm. You must get a little sometimes if you work amongst it.

46. What is the effect, as far as you have experienced it?—It makes you cough a little, but soon goes away.

J. Beetle.

47. It has never rendered you insensible?—Oh no, sir; nothing to prevent me going through my work with it.

48. (*Mr. Richmond.*) Is not the tendency to cause inflammation of the lungs?—I do not know, I never had inflammation of the lungs.

49. (*Dr. O'Neil.*) Bronchial irritation?—I have never had it; I have only been ill two or three days.

50. (*Professor Simpson.*) Do the men ever suffer from cough?—Oh, no. If you got a little gas you woul dcough, certainly; but it would soon leave you.

51. (*Dr. O'Neil.*) Is bronchitis, for instance, prevalent amongst the men?—No, there is none amongst us. I find it a very fair job, myself, speaking from my own experience, that is all.

52. (*Chairman.*) Can you suggest any means of getting rid of the gas, without affecting the work; any means of ventilation?—You know you cannot help a little gas rising out of the stuff when you are working amongst it. There is scarcely any gas when we go in, but when we stir the stuff up there must be some come out of it, and you may possibly get a little of that.

53. I do not know much about it myself, but supposing there was a hood over that place where you are packing, supposing there was a ventilator in the roof?—Yes, we have ventilators in the roof, in the middle, sir.

54. What sort?—Take the lid off, and there is a great round hole left.

55. No fan working there; nothing mechanical?—No, sir; we do not need any fan. Very fair chambers, ours are. We pack more than any other yard in St. Helens.

56. (*Mr. Richmond.*) Are the ventilators open only when you are packing?—Yes, they are open before we go in, sir.

57. Because the chamber has to be closed?—When they are making it; oh, yes.

58. Then there is some means of absorbing the gas that remains, is there not; they do have some means of absorbing the gas before you go in, do they not?—The stuff takes the gas up, sir.

(*Mr. Fletcher.*) That is not the gas that affects the worker; the chlorine is the lighter; the stuff is saturated with chlorine, and when they move the bleach powder it begins to come out.

59. (*Mr. Richmond.*) But do they not use a lime distributor for absorbing the gas. There would be more gas in the chamber if it was not absorbed before you went in?—They allow into the chamber so much gas, to make the stuff so strong, and then the stuff takes the gas up before you go in.

60. Is not the process this: lime is put on the floor first of all, and then the gas is turned in?—Yes, sir, it is turned in on the top.

61. And when the lime has absorbed all it can, there is a certain amount of free gas left above, in the chamber, is not there?—I do not understand that.

(*Mr. Fletcher.*) They do not use the lime distributor at the Globe?

(*Witness.*) No, sir, our chambers are clear when we go in.

62. (*Mr. Richmond.*) What means are taken to get rid of the superfluous gas. As far as I have seen these chambers, if you open a chamber and go in, there will be much more gas in there than there would be where they use these lime distributors?

(*Mr. Fletcher.*) It is the gas that comes out of the bleaching powder, after all is finished.

(*Mr. Richmond.*) But there must be a good deal of free gas in there.

(*Mr. Fletcher.*) That is all blown away before he goes in. It is open two or three hours.

(*Mr. Richmond.*) That is exactly what I want to get a knowledge of.

63. As to the gas that remains after the absorption by the lime, the remaining free gas, how do they, at the Globe, get rid of it before the

J. Beetle. men go into the chambers?—The stuff is supposed to take the gas up, and they draw the spare gas from one chamber on to the other one.

64. They draw the gas off from one chamber to another before you go in?—They are supposed to do so. There is nothing in when we go in, except what we stir up.

65. (*Professor Simpson.*) Are the doors thrown open after the gas meets the lime?—The doors are closed up, sir.

66. How long?—It takes a week to make a chamber.

67. Before you go in how long are the doors left open?—We can please ourselves. We can go in any time we like, we are not tied to time. We go in at 9 o'clock in the morning, or any time we choose, if we do our work through the day. If there was any gas in the chamber we would not go in.

68. (*Chairman.*) How would you know if there was any gas there?—We could see the gas, I suppose, and could smell it.

69. (*Mr. Fletcher.*) The chambers are open several hours before you go in?—It is a while before we go in.

70. (*Professor Simpson.*) How long?—An hour or two sometimes. It depends on the weather. In cold weather it is not as bad as in hot weather.

71. The doors are opened to get rid of the gas some hours before you go in in summer?—It is to cool the chambers, sir. I do not know about the gas. The stuff is supposed to take the gas up before they open the chambers.

72. Do you not think you would feel more gas if you went in two hours before, just as they opened the doors?—The chamber would be much hotter. You see, after the hot gas being on it for a week, they have to be opened to cool the chambers before you can go in. It would be much hotter if you went in as soon as they are opened, certainly. The chambers are very hot after they have been working on them a week, in summer time, especially. They are much cooler when they have been opened an hour two.

73. (*Mr. Fletcher.*) You protect your clothes when you go in by putting a paper round?—We wrap paper round to keep the bleach off our clothes.

74. Have they never used any over-all clothes instead of paper? Do you think paper is the best thing?—The paper is just to keep the bleach out of our clogs. If it got into your clogs it would burn you.

75. You keep your clogs free with paper?—You wrap the paper round your legs close with string so that the bleach cannot get into your clogs. That is all that the paper is for.

76. Is that better than any kind of leather or india-rubber?—I should think it is as good as anything, because you can get it very close, so that no dust can get into your clogs.

77. (*Chairman.*) Do you wear anything for your eyes?—Yes sir, just to keep the dust out.

78. What do you wear?—A pair of glasses. I have a pair here if you would like to see them.

79. I should, please?—They are not very clean. They are just as I wear them, just to keep the dust out of my eyes. (*Produced.*)

80. (*Mr. Fletcher.*) Do the men generally wear these?—No, but some people sweat a lot, and the sweat gets into their eyes, and that keeps the sweat and the dirt out of your eyes. That is what I wear them for—they prevent anything getting into your eyes. They want cleaning now.

81. (*Mr. Richmond.*) Are they made for the purpose in St. Helens?—Oh! yes, sir, you can get them made by leather cutters. There are none for sale in the town, that I know of, but if you order them, and tell the man how you want them made, he will make you a pair. They save the eyes.

J. Beetle.

82. You say all the packers do not wear them?—All our packers wear them, all where I work. They used not to wear them at one time, but we all wear them now at our works.

83. (*Dr. O'Neil.*) What name do you apply to them?—We call them goggles.

84. (*Mr. Richmond.*) You think that, as long as you wear a muzzle, and these goggles or glasses, you get no ill effects from your work at all?—No, not at all. You must get a little gas sometimes, same as I say, when your flannel gets a little wrong, and you have to come out and repair it. You cannot help getting a little the way it is made. When you stir the stuff up, there is a little comes out of it.

85. And the effect of that little that you do get is to make you cough, is it?—Yes sir, it will make you cough if you get a little.

86. Does it affect you afterwards, for some time, in the throat?—No, it goes away, and leaves you.

87. (*Mr. Fletcher.*) You yourself have been working there five years, but some of the men have been working at packing a number of years; do you know how long?—The yard has only been there 13 or 14 years. The man who works with me has been packing, I suppose, over 20 years.

88. And his health is good?—Yes, he is never ailing; he has very good health.

89. Is packing always done in the daytime, or at night?—We never work at night, sir; we always do ours in the daytime. We go in about 8.30 or 9 o'clock. If we have only one chamber we finish by dinner-time.

90. Then you have easy times of it, plenty of time for everything?—Yes, sir; if we choose we are not pressed for time at all. We just go in and do our day's work; we know what we have to do, and our manager does not press us to come in early. We generally go in after we have had our breakfast.

91. (*Professor Simpson.*) Are many of the men engaged in your work abstainers, or not?—We have one in the lime-house that does not take any drink at all.

92. (*Dr. O'Neil.*) But the majority do?—It is their pleasure.

93. Are they temperate as a rule?—Some people drink, but it is not for the sake of their work. If I took drink at my work, I could not do it.

94. Does your work require it?—No, sir. I can do my work twice as well without it. If I get drink over night I cannot do my work half as well afterwards. You get in company sometimes, and get drink, but you do not need anything to do your work. I always find I am better without myself.

95. (*Chairman.*) Have you known any man get gassed seriously at your work, since you became a packer?—No, sir, not seriously gassed. I have seen men get a little, but not enough to stop them from their work.

96. (*Dr. O'Neil.*) Have you appliances on the works themselves to restore any man who might be gassed?—No, sir; we had my father-in-law hurt a few weeks since, and we had to send to the "public" for a glass of brandy for him.

97. (*Professor Simpson.*) What was the worst effect you ever saw of gassing?—I never saw any serious effect.

98. What was the worst effect?—Only just a man coughing.

99. A single cough or more?—Oh a little more. It would make him cough regular for a while.

100. Five minutes?—Oh yes, sir, above five minutes. They cough longer than five minutes.

101. That is the worst you ever saw?—I never saw any one seriously gassed.

J. Beetle. 102. What was the case of your father-in-law?—He is old, and he got a wheel over his foot, and we sent for the brandy.

103. (*Professor Simpson.*) The man who was coughing four or five minutes, had he a muzzle on?—No, he had taken it off. If he got a little gas, he would take it off.

104. (*Mr. Richmond.*) Have you ever worked at the Deacon Chambers?—No, sir, I have never packed any, only in the Globe Chambers, but I have a friend working with me that has.

105. You have never seen the new Deacon Chambers put up at some works?—No, sir, I never have.

106. The Deacon Chambers you do not have to enter at all?—No, sir. I have a friend who works at them.

107. Are there any of the Deacon Chambers at St. Helen's?—No, I do not suppose so.

108. They are only at Widnes?—I do not know where they are myself. I have never seen them.

109. As you have no knowledge of them, it is no use asking which you think the best?—No.

110. (*Professor Simpson.*) The gas can never produce coughing so long as the muzzle is worn?—Yes, you might slightly get gas with the muzzle on, if, as I say, it sometimes gets a little too dry or wet, and you must go and pull it off and regulate it.

111. (*Mr. Richmond.*) If you inhale through your nostrils you get gas quickly?—Yes, if you find you are getting gas you must go out and regulate your muzzle. It might be a little too dry or too wet, and sometimes you might not be able to breathe through it properly, but all you have to do is to go and regulate it.

JOHN BETNEY, examined, stated:—

J. Betney. I work in the salt cake department at Gaskell Deacon's works of the United Alkali Company. I have worked about 51 years in alkali works, and about 36 years in the salt cake department. I am 64 years of age. My health has been very good. I never found anything detrimental to health in my work. The gas at the salt cake furnaces only injures the teeth, and there is not so much injury in that way now owing to the introduction of the boxes attached to the salt cake furnaces for the charge to be drawn into. I think the injury to the teeth was in great measure due to the rag held between the teeth and tied round the face.

I think the hours of work are too long and eight-hour shifts would be preferable, but the men are against them.

The work at salt cake pots and furnaces is not extra hard. The men have this summer been supplied with meal and water, but not previously for some time. Men earn about 7*s.* 6*d.* per day for 12 days per fortnight. Five tons of salt cake per day of 12 hours to be delivered, each man receiving 1*s.* 6*d.* per ton. The burner men at our works are on eight-hour shifts.

I was about eight years working at the pots and furnaces. The chief accidents that occur in the salt cake department arise from back draught from the furnaces, through re-lighting after they have been out. I think they generally occur through the men not pulling out the dampers, and that their own carelessness is at fault. I think we are short of closets, which are open dry troughs, and often too far from where the men are working.

ROBERT HANKINSON examined by—

R. Hankinson. 112. (*Mr. Richmond.*) You work at Baxters, St. Helens, I think?—Yes.

113. That is one of the works of the United Alkali Company?—Yes, sir.

114. Are you employed in the caustic department?—Yes, sir.

115. How long have you worked in it?—At Baxters altogether in the caustic department between 15 and 16 years. *R. Hankinson.*

116. In chemical works how many years altogether?—Between 15 and 16 years. I was in service before that, sir.

117. You work at the caustic pots?—Yes, sir, I am a caustic finisher.

118. You know what this inquiry is for, to find out what dangers attend people working in chemical works. As far as you are concerned that applies to the caustic shed, and to try and find means of making the pots safer to those employed. Have you worked at any other pots besides the ones at Baxters?—Yes, sir, I have worked at the Widnes Alkali Works, a matter of 18 years ago.

119. Were they of the same construction, the pots?—No, sir.

120. Which in your opinion are of the best construction?—Well, sir, there is a different system of working between the two sorts of pots. There is not much difference in the pots but a different system of working. In the case of the Widnes Alkali Company's pots the liquor is worked up to a certain degree where the potman has nothing to do but to run a set of pots, and to run the strong liquor into the pots. They have not to contend with back pans or anything. We at Baxters have back pans and we get our weak liquor into the pots for finishing and have to work more round the pots than they have. I think they had only, at the time I was there, about five pots in a row, and you know that we have 15. Of course, it is a long way round to go round all the pots. I do not suppose they had any more room, but they were not as high as we have.

121. They are quite of a different structure, are they?—Yes, sir.

122. It is very much easier to get near the tops of your pots than it is of their's?—No, I do not think it is, sir. I do not think it is any easier to get near the top than what it was then, because there of course the pots were not so high as what ours are at present; the only obstacle is that we have to go a little more between the pots than they did.

123. You have to go between your pots?—We have sometimes.

124. Is it not the case that between your pots there is a great deal of waste which has collected from time to time till the pots are almost connected at the top?—Well, it is so, sir, they might be kept a little cleaner than what they are. They are not kept as clean on our system of working. It is a different system of working. I was trying to point out to you what the difference is. They work the clear liquor, having no rubbish to work up, whilst of course we work everything in. Their's is a system which gets liquor up to a certain strength. They take all the salts and everything from the liquor and send the pure liquor down, so you see they do not get as much salts and things of that kind in the liquor as we do, and it does not cause the liquor to form as you saw it that day you were round.

125. And with the present structure of your pots it is possible to work all round on the edge of the pots. There is practically that breadth all round your pots which you could work round?—In most cases there is.

126. So that you would be above the pots?—Oh, no.

127. But I mean practically that you must be a great deal above the pots?—Yes, it may be so.

128. That is, if you are standing near your pot there is not three feet from your foot to the top of the pot, or anything like that?—No.

129. It is a matter of inches more than feet?—I dare say it is in some cases.

130. I mean when you stand at the pots, practically you are above them?—I should be below the pot.

131. But your feet would be very little below?—Yes.

132. In the case of pots as they make them now when you stand on the ground it is 3 feet from your feet to the top of the pot, you can have three feet everywhere. But with the ones I am speaking of at your

R. Hankinson. works they are practically on the same level, and the men who are working here on the platform (*indicating*) can work from pot to pot and practically all round the pot?—Yes, sir, that is the construction of those pots.

133. So that there is nothing like 3 feet from the top of the pot to your feet?—Nothing like it.

134–5. And as I said, it is more a matter of inches than feet?—In front of the pot it would be, as near as I can say, 20 inches, sir. That is the average, taking one and the other.

136. Some are not even that?—In some places it is not that and sometimes it is more. As a rule it is 20 inches.

137. Now, I believe that you have had experience of the dangers there yourself?—Yes, sir, I have had a little.

138. You lost an eye there?—Yes, sir, I did.

139. At those works?—Yes.

140. That was from splashing of the caustic?—Yes, sir.

141. Was there any water at hand on that occasion?—Well, there was water down in the fire hole.

142. But no means of getting to use it?—No, no appliances close at hand.

143. But there was a water tap?—Yes, down in the fire hole.

144. (*Mr. Fletcher.*) You could have drawn water there?—Yes, but it was underneath the stage upon which I was working, sir.

145. But you could have filled your water can if you wanted there?—Of course you could have filled your water can there.

146. But although it was so near it was not near enough to save your eye?—No, sir.

147. (*Professor Simpson.*) How long would it take to where you got that splashing to get to the water?—If the road was clear it would not take a minute, it was simply jumping from this platform, and then into the fire hole.

148. You say if the road was clear or ready?—The road is not ready at all times, because sometimes the fire hole is filled up with coal and you have to jump on the coals to get down into the fire hole.

149. But there is a water main tap on the stage there close by that cupboard?—Yes, sir, but it would be handier to get down there.

150. Now, as a matter of fact, when you got the caustic into your eye did you get at the water?—I got it through someone else as soon as I could.

151. You would not be able to see your way?—I did see my way because there was not anyone about me at the time, but I could not depend upon myself jumping down the hole. I groped my way.

152. Then how long from the time you got the caustic in your eye did you get the water applied to it?—It was not very long sir, I could not justly say what length of time.

153. (*Dr. O'Neil.*) But it was too long for you?—It was too long if I had had it immediately.

154. Was it while you could count 100?—Till I could get to the end of the stage and drop down between the two stages I should say it was a matter of 30 yards.

155. I think the method you have there is getting a man to fill his mouth with water and squirt it into the eye?—Yes, sir, of course, but if there is not too much in you get him to put his tongue in your eye and lick it out.

156. If there is not much in, but if more?—They wash it then and lick it afterwards.

157. Is that the usual plan?—The plan we use.

158. Have you any such thing there as syringes?—No, sir.

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159. Do not you think that syringes close at hand would be better?—They would be better if we could keep them clean.

160. That is to say if they were kept in boxes?—Yes, sir, but they would want to be in a very close box.

161. So as to keep the water in them clean. If they were kept charged with clean water and put in boxes, you think they would be effectual then?—Yes, sir. The great secret is, with caustic in a man's eye, washing it out clean.

162. So that a syringe or spray bottle would be the best appliances you could get for it?—Of course, anyone who understands, you know, they get it under a good force of water and wash it out thoroughly. It is rather a tender place is the eye, and anyone who gets the caustic in does not like you to meddle with it. They keep the eye shut and you have almost to force it open.

163. Are these splashings very frequent?—No, sir, mine was quite an accident. It might not happen in a hundred years.

164. Was it because the pot was uneasy?—No, sir, it was not uneasy, I took a little out at the cooling, and there was a thorough hurricane blowing that night. The wind was blowing south-west at the top corner of the shed, and it was raining a little at the time, and my spade must have been damp, and when I dropped the caustic on my spade it recoiled back into my eye.

165. It flew?—Yes, sir, it was from my sample spade.

166. But you do get splashes from the pots themselves?—It is very seldom we get splashes from the pots.

167. When did you see a man get splashed last?—About two days ago.

168. How often will it occur?—It just depends how neglectful they are.

169. Once or twice a week?—Oh no, sir, it was a matter of neglect that the man got it the other day. He said he would not do it any more, but it was too late then, he had got the splash.

170. You do not use goggles?—No, they interfere with your work too much; the steam would get on to the glasses, and you would not see where you were going.

171. (*Mr. Fletcher.*) You know the Green Bank works. They keep syringes there?—Yes, sir.

172. Mr. Balmain used to keep syringes always ready, and saved many an eye by having it always ready to squirt into the eye?—Yes, I have heard that.

173. (*Mr. Richmond.*) You think that syringes would be a good thing to require?—It would be a benefit to the men, but I do not think Mr. Balmain ever saved many eyes if the caustic got into them. If it gets on to the sight it burns it, and you cannot wash it out.

174. It may be so bad that even a syringe will not prevent it doing permanent injury, but there are many cases where it would be of advantage?—Yes, if it dropped into the corner of the eye and you washed it out thoroughly it stops it from striking across, and it naturally strikes across.

175. Well, now, in regard to these pots, you have had further experience. I believe your father met with his death at these pots, did he not?—Yes, sir.

176. Can you tell us how that happened?—Yes, sir, I can tell you from his own lips.

177. His ordinary work was on the platform, was it not?—Yes, sir.

178. Tell us what he was doing, and why he was near the pots?—There is a lid that hangs over the pots and there is a chain attached to it by which it is hoisted up. The lid was lowered, but it was not parallel with the top of the pot, not quite over the pot, and he had his pot full and he was filling the adjoining pot, then he was pulling the lid of the pot down. There is a long hook for that purpose, but he had not got hold of the hook, and thought he would not require it as it was not so far. He

R. Hankinson. was pulling it over with the help of another man, when he happened to say "That will do," when the other man let go of the thing and it caused a slack on the chain. The result was that he was thrown over, and he fell over on to the pot and his arm went into the pot up to the elbow. The result was that mortification set in and he died through it. I dare say he was standing 3 feet from the pot at the time.

179. (*Professor Simpson.*) Was his arm burnt ?—Yes, sir, right up to the elbow.

180. (*Mr. Richmond.*) Now, what height above his foot was the pot ?—About 20 inches, sir.

181. As he fell he must of necessity fall into the pot more or less ?—Yes, sir. He got into it, but of course he would not have met with the accident if he had not had his pot so full as he had it.

182. (*Dr. O'Neil.*) You speak from report as to the state of the pot ?—Yes, sir. I did not see the pot. I have only my father's words for it.

183. (*Mr. Richmond.*) How long ago did this happen ?—Two years ago last April, sir. He was working with me at the time.

184. Had he worked at the pots long ?—He had worked at the pots, I should think, for 30 years.

185. (*Professor Simpson.*) Did you ever know any other fatal accident there ?—I knew of one where a man fell into the operating pan or agitator. It is like a big boiler with the top of the boiler cut off, where the liquor is run into it and mixed with lime and water, and it is what they call causticised there. He was putting a leg or syphon there, by which they syphon the liquor off. He had a hook or appliances for shifting it down, and was shifting it down when he over-balanced himself and dropped into the lime.

186. (*Mr. Richmond.*) Was that an instance again where the top of the agitator was less than 20 inches from his foot ?—No, he had climbed on to the top of the agitator and stood up.

187. Then he had not got 3 feet ?—There is above 3 feet, but he got on to the top of the agitator. Since that accident happened there has been more protection put on the agitators; there have been bars put across so that you cannot actually fall in now.

188. (*Professor Simpson.*) How long ago was that ?—About three years since.

(*Mr. Richmond.*) I was at the inquest, and got the bars put across afterwards.

189. (*Mr. Richmond.*) Have you seen any of the pots as they are being constructed at Widnes ?—I have not seen any of them.

190. They are being constructed so that you can walk all round the pot like this (*indicating*). The height from the floor to the top of the pot is 3 feet and the brickwork of the pot is being made perfectly smooth, and the top is constructed so that there is no footing on the top of the pot at all. Do you not think that that is a very much safer construction of pot than what you have at present, that is with regard to falling into the pot ?—I understand perfectly well what you mean ; you will have a road through between the pots, but what width ?

191. The distance would not be more than 9 inches, perhaps, which is enough for a man to go sideways through, and with 3 feet from the ground to the top of the pot and the brickwork with no room on the top of the pot upon which he could stand, do you not think that then it would be much more difficult for a man to fall into a pot of that construction than it is in your works at present ?—Yes, if he has not to climb up to fix the racks, as we call them.

192. No, they have not to climb up at all. They are being made at Widnes now so that you can go all round them ?—Yes, sir, but I do not think there is any firm at Widnes that works on the same principle as we do.

193. Well, that is how they are making them now, and you understand that by that construction a man cannot stand close to a pot and be

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above it, so that if he falls he falls into it. I do not know whether you said you knew the Green Bank shed?—I know the old shed, sir.

194. Do you know that lately, last year, I think it was, there was a man killed there?—Yes, I should be hearing something about it.

195. Well, this man was killed by walking there from one pot to another. He went up a ladder to one pot, and then instead of coming down that ladder and going up the next ladder to the other pot, he walked from one pot to the other on the brickwork, and so fell in. Now you see there is that danger to these pots. Do you think that that could have happened if there had been this clear space round the pots, and the pots 3 feet above the floor. It would stop accidents of that kind; a man could not walk then from one pot to the other?—No, he could not if they were all safeguarded in the same way, or unless he used a plank in some way.

196. But that is also to be illegal; planks are not to be put across, so that the construction of the pot would of itself obviate any chance of an accident of that kind, would not it?—Of course, if the thing could be kept clean and all that.

197. You mean kept clean between the pots; that is absolutely necessary, of course. There would be danger if accumulations were allowed, but that is obviated by making it absolutely necessary to keep all clean?—Of course, but my idea is not to have them quite as high as what you have said, because we have to work between our pots a good deal. I know your idea is safer as regards where they can work it, but we have a great deal more to do between the pots than any one else has.

198. But if the pots are made to work satisfactorily at Widnes at the present moment?—They will have to be worked somewhere else, I suppose.

199. I mean if it is possible to work them at Widnes it is possible to work them at St. Helen's if made on the same construction?—Yes, sir, but it would be a reconstruction altogether at our works, right from beginning to end.

200. But an alternative which has been accepted, I believe, is to guard them if they are not 3 feet from the ground to the top of the pot, to have guards round them?—What kind of guards, sir?

201. They are in existence now at Flint, and they have been at Widnes in some of the works. They put a circular guard round the pots?—Yes, sir, iron railings?

202. Yes, iron railings made of piping?—How are they fixed on the pot?

203. They stand back a bit; there are four or more uprights, and a circular rail running round?—Are they permanent?

204. No, they can be moved?—Well, they have to be moved to do any of their work.

205. I do not know, not with your ordinary work I should say. I should think they would be taken down when the pot is re-constructed, but not otherwise?—For instance, if we had them guards and wanted to put a lid down, could we put the lid down with those guards there?

206. Oh, yes, the manager said that could be done by setting the uprights back?—Could we fix shoots in them to take the liquor from one pot to another?

207. Yes, the manager made no objection to that. He said it could be done?—You have eight pots on a level with guards all of the same height, and I want, say, to send liquor from pot number four to pot number eight, and I want a little fall for my liquor to go; how am I to get that fall?

208. You mean whether the rails will interfere with that shoot?—Yes, sir.

209. The manager has said he can do it. Of course, if you see it constructed, and the shoot doing its duty, you will be satisfied?—I have seen guards round them at Kurtz's.

R. Hankinson.

210. Well, what did they do with their shoots then?—As I said, they worked there on a different principle.

211. You mean that with your pots, there would be some difficulty in the working of those special pots you were working at?—Yes, sir.

212. But if the construction of your pots is condemned?—Well, then of course they would have to be re-constructed.

213. What I want to get from you is where it is possible to construct pots so that you may use the shoots it is desirable to have the guard?—Yes, sir, that is as you say.

214. All these things are possible?—Yes, sir, probable.

215. It would necessitate the re-construction of your pots entirely?—Yes, sir.

216. But as many people think your pots are the most dangerous in the kingdom?—I do not think they are.

217. But you have worked with them and not with others?—Oh yes, sir, I have worked at the Widnes Alkali Company's Works and the British Alkali, Mr. Brock's place.

218. (*Chairman.*) Taking your own pots into consideration, can you suggest anything to make them safer for the men working at them to prevent accidents?—Well, as regards the working of the pots, the only thing that I could recommend is to drive a little lowerdown to give you about 6 inches lower down, and to keep a level footing round you. I believe that some of them are 2 feet 6 inches down, and if you had 2 feet 6 inches of room between the pots, and a clear sound footing all round, I believe it would be just as safe as it would be otherwise. I am speaking of the passage between the pots as being 2 feet 6 inches broad.

219. And how broad are they now?—It runs from 2 feet 6 inches to 2 feet in some places.

220. From the top where the rubbish begins it is 2 feet 6 inches but it gets narrower?—Yes, sir, but if the narrowness were taken out, and you had a flat service, with a firm footing, I think that would be better.

221. Mr. Richmond suggests that you have at least 9 in. of flat surface at the bottom; is not that sufficient?— I am speaking of the whole 2 feet 6 inches of flat surface. I mean between the pots here, at the top.

(*Mr. Richmond.*) This 2 feet 6 inches is all filled up with rubbish at present, and in order to get over they walk across there. I suggest that it should be carried down to the bottom; all cleared away to the bottom, and if there was 9 inches space, to go sideways between the pots, and have a smooth passage there 2 feet 6 inches broad, that would do. The objection, I think, is, that if you are standing there the top of the pot is not 3 feet from your feet—merely about 2 feet.

(*Chairman.*) What is the obstacle to lowering it now, if it is only rubbish that fills up the space.

(*Witness.*) It is not rubbish that fills that space altogether. There is 2 feet 6 inches here (*indicating*), but on the side of this pot is 9 inches of brickwork, and this flue should be 5 or 6 inches at the very least. You have to work it up so that the flue comes out about 20 inches from the top of the pot, so as to allow your gases to develope round the pot, and get all the heat that you can give them.

222. (*Mr. Richmond.*) But if the rubbish were taken off it would be part of the way? — Yes sir, and if a couple of 4½ bricks were taken off, and made level with the pots, you would have firmer footing.

223. You agree with me that the passage through between the pots being on the level of the pots, practically, is much more dangerous than if the rubbish was cleared away, and a part of the brickwork?—Yes, sir, but not quite so low as you say.

224. That is a matter of opinion as to what the depth of it should be made but a passage between lower than what it is at present would be of great benefit?—Yes, sir.

225. (*Professor Simpson.*) Every passage between the pots you speak of would be 2 feet 6 inches in width?—Yes, sir.

226. And as you are on that passage, walking between the pots, 2 feet 6 inches being the breadth between the pots, how much below the top of the pot would your foot be?—About 20 in. if this brickwork was taken off, sir. *R. Hankinson.*

227. (*Mr. Richmond.*) As it is at present?—At present it is not. I suggest that it should be taken down to 20 inches. On the principle we work on, I think that would be best.

228. (*Professor Simpson.*) How many inches at present is the foot space, where your feet would be, from the top of the pot?—If the pot is clean between now, I dare say it is 15 inches.

(*Mr. Richmond.*) Many of them are not that. They are not kept clean.

(*Witness.*) Yes, but if the thing is cut square, you would have them kept cleaner than now.

229. (*Professor Simpson.*) Even less than 15 inches—how much less?

230. (*Mr. Richmond.*) Some are nearly on the level; is not that so?—Yes, sir.

(*Dr. O'Neil.*) In fact there is no interval.

(*Witness.*) The interval is there, sir.

231. But it is filled up?—Yes, sir.

232. (*Mr. Richmond.*) So that you walk between the pots on the level?—Yes, sir.

233. And you do not think that walking between two pots on the level is a safe thing, do you?—No, sir, I do not.

234. You know that on many occasions, pay days especially, the workmen get more drink than is good for them?—It is not a matter of the drink question, but if it is on a level with the top of the pot it is liable to give way under your feet.

235. Yes, but this man who was killed, it was said he had been out a good deal of the afternoon drinking with some friends, and then returned to his work?—That may be so, sir.

236. And a passage on the level of the pots for a man not steady on his legs must be a very dangerous thing, must not it?—Yes sir, it must. There is sometimes rather a false spirit in a man when he gets too much drink.

237. And you agree that if the work can be done equally well with a clear space of three feet all round, from the ground to the top of the pot, with a smooth surface to walk round on, that would be a much safer construction of pot than you have at present, leaving out the question, mind you, as to whether in your opinion you could work your pots as well, because if it can be proved that they are already in operation, that would not much matter?—I certainly cannot do otherwise than agree with you that it would be safer.

238. If they can be constructed to do your work as well?—It would be equally as safe.

239. A man cannot fall into a pot if he stands 3 feet below it?—But the question is whether, when the men want to get to certain work ——

240. We are leaving out the question whether they can work equally well. I can show you pots so constructed in actual operation, and all I ask you now is whether in your opinion it would be very much safer to have pots of that construction, provided you can do your work equally well?—Well, if I had seen the pots and the men working them, I might have given a better explanation. You have seen them passing through only.

241. I have seen them in full operation.

242. (*Professor Simpson.*) Would it be more likely for you to fall accidentally into a pot 3 feet from the ground, or into one 2 feet 6 inches from the ground?—I would be more likely to fall into one 2 feet 6 inches, I should say.

(*Professor Simpson.*) Therefore the 3 feet one must be safer.

R. Hankinson.

(*Mr. Fletcher.*) The hesitation in his mind is whether they can work it as well.

243. (*Chairman.*) One other question. About the hours of work: what hours do you work?—We work on an average 12 hours a day.

244. Including meal times?—That is including meal times, altogether 12 hours a day.

245. You work by day?—By day and night, sir.

246. You have two turns of 12 hours each?—Yes, sir.

247. It seems your turns are not one long and one short?—Yes, our turns are one long and one short. Our time is supposed to be 12 hours, but we arrange it with one another that we do not come quite so early in the morning and get away a little earlier at night on the day turns; but our proper time is 6 to 6 o'clock.

248. (*Chairman.*) What time is the long turn?—On the Saturday afternoon from 1 o'clock to 6 o'clock on the Sunday morning.

249. That is 17 hours?—Yes.

250. (*Mr. Fletcher.*) But part of the time on the Sunday morning is stoking and so on?—We generally knock off on the Sunday morning, except stoking the fires, &c., for the Sunday night men to come in.

251. (*Chairman.*) Do not you think that long turn is the cause of accident through the men getting tired and done up?—No sir, I do not think so.

252. (*Mr. Fletcher.*) You are not 12 hours continuously at hard work. You work an hour, say, and then rest, as the work admits it?—Yes sir, we may have an hour, or an hour-and-a-half with nothing to do scarcely, and sometimes three hours with nothing to do, and then four or five hours hard work, and then again three hours with scarcely anything to do, except to keep our eyes about us.

253. (*Dr. O'Neil.*) Is that long shift necessary for changing the shifts?—For changing the shifts. If we did not do the long turn, you would have one set of men staying on till 6 at night, and the others relieving them then, and a man scarcely has any pleasure if he has not a Saturday afternoon off sometimes. It is the men's fault that it is done.

254. (*Mr. Richmond.*) As far as the company is concerned, you may work from 6 to 6 only?—Yes.

255. Have you any Sunday work?—We go in at 6 o'clock—6 to 7, on Sunday nights.

256. The chief Sunday work is keeping the fires going?—The dampers are all in, and there is one man there to keep a little fire on, and then he goes home at night.

257. (*Chairman.*) Are there any boys under 18 employed in your works?—No, sir, not in our department.

258. (*Professor Simpson.*) Would eight hours a day be possible in your work?—It would be a great reduction of wages.

259. Yes, you are not in favour of it?—No, sir, I am not. If I worked eight hours I could not expect to get as much for it as I could for 12 hours.

260. (*Mr. Fletcher.*) And you could not get more work out of the pots with three eight hour shifts than with two of 12 hours?—No, sir, I do not suppose we could get any more.

261. (*Mr. Richmond.*) I do not see how you could; the pots are always in operation?—Always in operation.

262. Are your sheds well lighted for night work?—Yes, sir.

263. By what?—By gas.

264. So, I mean, that you can see where you are going?—In the front of the pots there is a gas jet at every 20 feet, and behind the pots it is about the same, sir. At some places it may be less, at the end of the shed, or anything like that.

265. Can you tell me what is your loss of wages by coming here?—I get 54*s.* to 55*s.* a week for 6½ days.

266. Then how much do you lose by coming here to-day?—From 8*s.* to 9*s.* *R. Hankinson.*

267. (*Mr. Fletcher.*) Can you tell me whether there are any other tanks or vessels of any kind in your department, besides caustic pots which are particularly dangerous?—No, sir, there is not, with the exception of the revolving pans, and you simply go up a ladder to them, and have a look to see if they are full, or any thing like that.

268. When the causticising pans are fenced, there is no danger?—No, sir, there are no other pans, only the caustic pans.

Mr. Richmond stated that Mr. King was in attendance with 23 men, but he had arranged with him to select six for examination.

Mr. King and the six men then entered the room.

JAMES RYAN examined. *J. Ryan.*

269. (*Mr. Richmond.*) Where do you work?—Kurtz's works.

270. In what department?—In the Weldons department.

271. Making muriatic acid?—Yes, making muriatic acid. It belongs to the Weldons department.

272. But what you are actually working at is the manufacture of muriatic acid?—Yes, sir.

273. (*Mr. Fletcher.*) You work at the muriatic acid pots?—No, sir, the towers. I attend the condensing towers.

274. You do not work in the salt cake furnace?—No, sir.

275. (*Mr. Richmond.*) How long have you worked at it?—A little over 12 years.

276. All at the same process?—Very nearly.

277. What have you got to tell us about your experience?—Well, I have got gas during that time so that I was not very well able to come, not in the mornings.

278. How often were you gassed?—I could not tell you exactly, but a good many times, sometimes worse than others.

279. With muriatic acid?—No, chlorine gas.

280. I thought you said you attended the towers?—Yes, sir.

281. Do you work at the chlorine stills?—No, sir, but still I am working amongst both. I have to look after things in the chlorine department I work on both sides, salt cake and that as well. I look after the pipes.

282. Then were you gassed by chlorine or muriatic gas?—By both.

283. What are you by trade, a plumber?—No, I am a labourer or acid maker.

284. Now, what effects had the gas on you?—It left me very short in the breath. Occasionally I have not been able to get over it for an hour in the morning, first thing after I get up. Up to the top of those towers is 40 feet, and sometimes I would have to rest two or three times before I got to the top.

285. Was the gas that you were affected by in the open or in the shed, or how?—In the shed.

286. You mean that it affected your throat, was it?—It affected my inside, and left me short of wind.

287. (*Professor Simpson.*) Anything else?—I lost a finger.

288. But any other effect of the gas except shortness of breath?—I do not know that there was anything else.

289. (*Mr. Richmond.*) You mean temporarily?—Yes, sir.

290. Have you had your health damaged permanently?—I have not got my health the same that I had when I went there first, not by a long way.

291. What did you lose your finger by?—I got poisoned by red lead, the stuff I used.

292. You had some wound on your finger?—No, it worked under the nail itself, the stuff I used for that job.

J. Ryan.

293. (*Professor Simpson.*) What took place, did your finger swell up, or what?—Yes, mortified.

294. How soon after the red lead got under your nail did it mortify? —It might be three or four days afterwards, or it may have been there longer than what I knew.

295. Did the inflammation spread at all?—No, when it started it broke out under my arm and down in the groin.

296. (*Mr. Fletcher.*) The cases you speak of where the gas affected you, did it come from leaky pipes, or from the salt cake shed?—It might, perhaps, sometimes come from a chamber or still when they were running off. I have been working amongst it, and had to go in amongst it, when they were running a still off, or the like, or if there was a chamber down I would have, perhaps, to do some little job round about while it was clearing away.

297. (*Mr. Richmond*) That was in the open; you have never been inside? —The stills are in the inside under the shed. The chambers are in the open.

298. Then any gas that you got from the chambers was passing the chambers outside?—Yes, I might have had a job close to them.

299. (*Mr. Fletcher.*) You were doing labouring work?—Yes, sir, about the pipes, and connected with the stills.

300. (*Chairman.*) When you are doing work of that kind do you wear any respirators?—Sometimes I would have a piece of flannel in my mouth to keep it from getting inside if I could.

301. How long ago is it since you were last affected by gas?—Well, I was affected last week.

302. In which works was that?—At Kurtz's.

303. By which gas, chlorine or hydrochloric gas?—I think it was chlorine gas.

304. Did it come from the stills, the chambers, or the pipes?—A little of it from both.

305. Can you not tell us where the gas came from?—It came from both stills and chambers.

306. You would not receive it from both at the same time. They are not near together?—They are very close. I have often received it from both together.

307. They are 50 yards apart I should think?—No, they are not 10 yards apart, the stills and the chamber; the chamber is very close to one or two of them.

308. And you happened to be just between. Perhaps you could tell us where it came from a little more accurately?

309. (*Chairman.*) What were you doing last week when you suffered from the gas?—I have to go on to the top of these towers to regulate the water, and while I would be going up to those places the wind would blow it on to me. It just depends how the wind is.

310. (*Professor Simpson.*) When you are gassed do you suffer from want of breath?—Yes.

311. (*Mr. Richmond.*) You talk about gas floating about in the open, but you are not gassed in the same way as a worker in a bleach-house? —No, I do not go into the chambers like that.

312. What you get is gas in the open chiefly?—Yes, sir; sometimes I don't get much, but sometimes a great deal. It would depend which way the wind would be.

313. (*Chairman.*) Knowing your liability to this, why do not you wear a respirator?—I had got flannel for that purpose, but I might think I would not need it and not bring it with me, and just be caught in it. Besides, it is not very nice. You do not want to wear flannel in your mouth, the teeth tells that.

(*Mr. Richmond.*) Is that state of your teeth from wearing flannel between your teeth?—Yes, sir.

314. That is not a good kind of respirator clearly ?—No. *J. Ryan.*

315. What do you propose to prevent you suffering in the way you have stated, what do you think ought to be done ?—I could not say exactly what should be done to prevent that.

316. But that is what we are here for, to endeavour to find some remedy for this kind of thing if possible; if you, a practical man, can suggest anything we will take a note of it ?—I dare say there could be a good deal of improvements made in that respect.

317. In what respect ?—In preventing that.

(*Mr. Richmond.*) That is preventing the gas, but there is an Act of Parliament already which deals with that.

318. (*Chairman.*) Then you are not able to suggest anything as being a practical remedy to prevent your getting this gas in the future ?—I would not like to suggest anything of that sort. It might place me in a very awkward position perhaps.

319. I do not think it would at all. You are a practical man and I am not, and I want you to advise with me.

320. (*Mr. Fletcher.*) Could any kind of respirator be advised for you to work with and for you to wear ?—Well, there will be always a portion of gas escaping, no matter what remedy they try, so long as there is Weldon plant working. That will always affect a man who works round it.

321. Even if he wears a respirator ?—Yes, sir.

322. (*Professor Simpson.*) Then you think there is no remedy at all ?—They may be able to bring out one that will improve it a good deal, but it will never prevent the injuring of a man's health.

323. Did you ever have any other symptoms except want of breath ?—I spit a good deal first thing in the morning. It will be fast on the chest.

324. Anything else ?—I have a kind of giddiness in my head since I came to the job.

325. Anything else ?—Nothing else, sir.

326. (*Mr. Richmond.*) You are what is called a labourer in the works ?—I am not a tradesman, sir.

327. You cannot call yourself attached to the caustic acid, a burner, or anything of that kind; nothing distinctive. Yours is more labouring work in the open ?—Yes, sir.

328. (*Mr. Fletcher.*) You have been all the time you named working at Kurtz's works ?—Yes, sir.

329. Were you working anywhere before ?—Yes, sir.

330. Where ?—At Mr. Tinker's soap works.

331. (*Professor Simpson.*) Do you state that the symptoms, including shortness of breath, pass off very soon ?—It tightens me in the chest.

332. An hour or two ?—It might last a day or two.

333. And then pass away ?—Yes, sir, only I get a little more, and then it tightens me in the chest again.

334. How do you feel your general health affected ?—I am rather inclined to be sick and cannot eat the same that I did. It is very little that I eat for breakfast or tea. It is mostly dinner. I cannot eat at breakfast time.

335. (*Chairman.*) Now I am told that you had an accident recently; what was that ?—A plank broke from under me when at work.

336. Was that at one of the towers ?—No, I was putting in some pipes in a kind of platform.

337. And you were standing on the plank ?—Yes, sir, and it broke from under me.

338. Was anything wrong with the plank ?—It was rotten, of course, or else it would not have broken.

339. Did you select the plank or what ?—No, I did not select it, the plank was there before I started on the job.

J. Ryan.

340. Where did you fall?—I slipped straight through and alighted on a cross bar that was keeping one of the uprights in its place and caught me on the chest. I also hurt my head.

341. Was that at Kurtz's?—Yes, sir.

342. And was the plank rotten through the action of the acids?—I suppose it has been there a long time.

343. (*Professor Simpson.*) Were you long laid up with that?—Going on for eight weeks.

344. Had you headaches before that accident?—I had a kind of giddiness this last seven years in my head and I am subject to headaches now a bit since the accident.

345. (*Mr. Richmond.*) But that accident might have happened anywhere, not especially in chemical works?—Oh, yes, a plank might break with anybody in any place.

346. With a builder's man, for instance?—Oh, yes, I would much sooner that had not been mentioned. Bringing it forward again would not do for me very well.

347. (*Mr. Richmond.*) It is not an accident incidental to chemical works, It might have happened to builders building a house or anything?—Quite so.

348. What are your wages per week?—30*s.* 4*d.*, sir.

William Dooley examined.

W. Dooley.

349. (*Mr. Richmond.*) Where do you work, Dooley?—At Kurtz's works.

350. As a burner?—Yes, sir.

351. In the vitriol department?—Yes, sir.

352. Are you subjected to gas of any kind?—Yes, sir, two or three sorts.

353. Where is your special work?—In the burner shed.

354. What is the gas you are subject to?—Sulphur gas; it catches you on the chest and gives you a heavy feeling on the chest. Then you have nitre gas when potting the nitre, and when you have a rag in your mouth it rots your teeth—I have not a tooth in my head.

355. Knowing that, why did you wear a rag in your mouth?—A man could not do it without.

356. But a different sort of respirator should be used. I do not see much use of a rag in your mouth?—But where would you put it? If you tie it across your mouth it will slip down unless you tie it tight, and then you cannot breathe at all.

Mr. Richmond: It seems to me that you all condemn a rag in the mouth.

357. (*Mr. Fletcher.*) Do you think it would be of great assistance if you had a better respirator?—I don't know that it would.

358. Would you wear them if you had them?—Yes, sir, but you have to get your own, and I cannot afford it.

359. (*Professor Simpson.*) You would wear one if it was given to you?—Yes, sir.

360. How does the gas affect you; you say it is tightness in the chest?—Yes, sir, and you cannot eat anything, and are always dry, and always want some sort of drink to stimulate you and give you wind to last your time out, or else you could not work.

361. Do you mean that you must have drink, and that it must be alcohol?—Yes, sir, to put a false spirit in you.

362. What do you feel wrong with you when you have got this gas?—Sickly, you cannot eat anything.

363. And is that what makes you take whisky?—Yes, sir.

364. How does whisky make you feel better?—It puts a false spirit in you, and gives you a bit of wind, whisky does. It cuts the gas.

365. (*Dr. O'Neil.*) Do all the men in the place drink whisky?—Yes, when they can get it.

W. Dooley.

366. What do you mean by "cuts the gas"?—It cuts the gas which tightens you.

367. How often are you affected with the gas in this way?—Oh, every shift we are working.

368. And how long do you work a day?—Twelve hours.

369. Including meals?—Yes, sir. We have no set meal times on our job.

370. But do you take your meals in that time?—Yes.

371. (*Mr. Richmond.*) You start at 6 and stop at 6?—We work 13 hours one day.

372. But that is an arrangement between yourselves?—Yes, sir.

373. Do you know the rules with regard to burner men?—Yes, sir.

374. You have them posted up there at Kurtz's?—Yes, they were put up last week, because they knew the inspector was coming.

375. They are new rules, so it could not be because of the inspector. How long have you worked there?—Nearly three years at Kurtz's.

376. Did you work at chemical works before going there?—With the Widnes Alkali Company.

377. How long?—Four years.

378. At the burners?—No, about 12 months. I was blowing vitriol to the towers the rest of the time.

379. How old are you?—Twenty-three next November.

380. You began as a boy then?—Yes, sir.

381. Are there any boys under 18 working new in your department?—No, not working in our department.

382. Are any of the men working, as far as you know, your fellow workers, in the vitriol department, teetotallers?—No, none of our lot.

383. Now, is there any suggestion you can give to this committee to improve matters. What can the employers do more than they do now to make the working healthier?—They could give us more draught, and keep the chambers in better repair.

384. By draught do you mean ventilation?—No, a better draught from the kilns to the tower, not ventilation.

385. To carry off the gas, you mean?—To carry off the gas, and not have so much coming out.

386. Well, they could do that, and what else?—To keep the chambers in proper repair. When the wind blows downwards it brings the gas on to you from the vitriol chambers. They want patching regularly, and looking after.

387. (*Mr. Fletcher.*) How are Kurtz's works in that respect compared with others?—They are putting up new ones lately. They are making them better than what they were; they were bad.

388. (*Mr. Richmond.*) What are your wages?—36*s.* a week, but we have terrible long hours to work for it, 84 hours a week.

389. Do you work on Sundays?—Yes, sir.

390. That is general with the burners, is it not?—Yes, sir.

391. It is practically the only department where the work does go on on Sundays?—Burners, yes sir. That would be a great remedy if we dropped to 56 hours a week.

392. (*Chairman.*) But the work must be continuous?—Yes, sir.

393. So that you would want three sets of men?—Yes, sir.

394. (*Mr. Richmond.*) How would that affect your wages; do you want piece-work or weekly wages; which are you at now?—We are on weekly wages now.

395. And do you expect to get the same wages for eight hours as for 12 hours?—Well, they might allow a bit.

396. The question is, whether the manufacture would pay. You cannot make an article without profit of some sort?—No.

W. Dooley.

397. (*Mr. Fletcher.*) You see the chambers would not produce any more in the three shifts; that is, when you have got the eight hours shift, the chambers will produce exactly the same with the three eight hours shifts as with the two 12 hours shifts?—Yes, sir, they just do the same work in the 24 hours, that is all.

398. Then would you be content to work eight hours a day and receive diminished wages in proportion?—We would have to agree to that. I would be willing to work eight hours?

399. And be paid the corresponding lower wage?—Aye! if they did not put us too low.

400. But, exactly in proportion, it would be 24*s.* a week. That would bring it down for eight hours. Would you be content to take 24*s.* a week for eight hours?—24*s.* would not be enough.

(*Chairman.*) That is a matter we cannot deal with, of course.

401. (*Mr. Richmond.*) Do you have these new rules before you as to what burner men are to do?—Yes, sir.

402. And are they complied with properly?—Yes, sir, as well as we can.

403. Is a damper always drawn as directed?—Yes, sir.

404. These rules, you think, are carried out?—Yes, sir, as far as possible.

405. I suppose it is possible for them to be carried out. Is there any rule that the men could not follow?—That about the drawing of the dampers, they do not always do that.

406. Whose fault is that?—They do not allow us to touch the dampers, not the burner men.

407. But the rule says that the burner men are to do it?—The foreman does all the damper drawing and regulating of the dampers.

408. Then these rules say that every burner man who violates the rules shall be fined half-a-crown for each offence, and it says that you are to draw the dampers?—Yes, but they do not let us touch the dampers, and the foreman does not tell us when he does so. The dampers are not in our sight.

(*Mr. Fletcher.*) Dooley could not tell whether the damper is drawn or not.

(*Mr. King.*) Would you ask the witness if there are not special instructions given to the men about these dampers and other matters, when the inspector is visiting the yards.

409. (*Mr. Fletcher.*) Have you reason to suppose that there is any difference of behaviour on the part of the men when any of the inspectors are there?—Well, I know that they send over from one yard to another when the inspector is about, and when he does come into the works they send a lad out of the office to tell them that the inspector is about. He always goes in through the office.

410. (*Mr. Richmond.*) You are speaking about gas and so on under the Alkali Act?—Yes, sir.

411. (*Mr. Fletcher.*) You mean to say that a messenger comes down and says, "Don't charge the burners"?—We dare not charge them without orders then.

412. Have you been told not to charge the burners because the inspector was coming?—Yes, sir.

412A. By a man or messenger from the office?—Yes.

413. (*Dr. O'Neil.*) Don't you take your orders from your foreman?—Yes, sir, but if they send a man out of the office we are to comply with that too.

G. Burns.

GEORGE BURNS examined.

414. (*Mr. Richmond.*) Where do you work?—The Globe works at present, sir.

415. St. Helen's?—Yes, sir.

416. What department?—Salt cake.

417. Now, what gases are you subject to?—Mostly from the salt cake.

417A. Hydrochloric acid?—I have suffered from gases elsewhere more, not much from the Globe at present. *G. Burns.*

418. But what gas do you suffer from?—From the still gas I have done.

419. But at present you are working at the salt cake?—Yes, sir.

420. And that is hydrochloric acid gas?—Yes, sir.

421. How does it affect you?—It affects me on the chest very much, with a touch of bronchitis, and such as that.

422. And what are you working at, the pots or the furnaces?—At the furnaces at present.

423. Then you get the gas when you are drawing the charge, is that it? —Yes, sir.

424. You draw it in those boxes beneath the furnace?—Yes, sir.

425. Does that help much?—Yes sir, it does.

426. You get less gas with these boxes than you used to do?—Oh yes, sir, there is a great deal of improvements on it.

427. (*Mr. Fletcher.*) When do you feel the gas most, when wheeling away the charge?—No, sir, when I am working a furnace. I do not feel it much when wheeling away at all.

428. (*Mr. Richmond.*) That is when you are receiving the charge from the pots?—Yes, sir. I get the most punishment from it then.

429. (*Mr. Fletcher.*) Can you not reduce that by not having the doors open so wide?—No, sir. We must have the doors open.

430. (*Professor Simpson.*) What effect has the gas on you?—A touch of bronchitis and so on.

431. It makes you cough?—Yes, sir.

432. Did you always have bronchitis?—No, sir, except the last four years.

433. Did you have it continously that time?—Yes, sir.

434. And did you have good health before that?—Yes, sir.

435. (*Chairman.*) And you think that bronchitis was caused by the gas? —Yes, sir, the doctor told me so, what it was.

436. Do you know anything to prevent the inhalation of the gas?—I wear a big shawl across my mouth.

437. Flannel?—Yes, sir, flannel.

438. Between your teeth?—No, sir, I do not put it between my teeth at all.

439. How are your teeth?—I have scarcely any, they are all out now. I had to get some of them drawn, from the gas that I have got.

440. (*Mr. Richmond.*) How could you prevent that gas?—Oh, it could be prevented by giving more draught.

441. You mean by giving less gas?—Yes, sir, we should get less gas by more draught.

442. (*Professor Simpson.*) Where do you mean more draught?—In the condensers, sir.

443. Do you use a regular respirator?—No, sir.

444. Would you use one if you had it?—Yes, sir, I would.

445. You use a shawl?—That is all, sir.

446. Now, some of your men seem to get on very well, and tell us that they have good health who have worked at it for 20 years and so on. How is it that you feel it more than they do?—I have mostly got chlorine gas, but I am working at the salt cake at present, and I do not feel the effects of the gas as I did.

447. It is not so much from the present work as from past work then?—No, sir.

448. (*Mr. Richmond.*) When did you get the chlorine gas?—When making chlorate of potash.

449. You mean at the pans where they make it?—Yes, sir. I worked inside.

G. Burns.

450. You mean in the crystallization?—No, sir, before that. Chlorate of soda was one department, but I worked at the chlorate of potash and finished the liquor for it.

451. That is before it gets to the crystallizing then, you mean the actual manufacture?—Yes, sir, that is what injured my health.

452. (*Chairman.*) I suppose some of the men in the salt cake department are healthy enough, are they not?—Yes, sir, some of them.

453. Are there any boys under 18 working in your department?—No, sir.

454. What hours do you work?—I work 12.

455. Including meals?—Yes, sir. I have 13 on the night turn and 11 when I am on the day.

456. Do you work on Sundays?—Yes, sir, Sunday nights. We go in at 4.30 or 5 o'clock.

457. Not during the day up till 6?—No, sir, not during the day.

458. How many hours a week do you work?—Eighty now, or something like that. Sometimes we work a great deal more.

459. (*Mr. Fletcher.*) Eighty hours a week?—Yes, sir, and sometimes we work Sunday morning, cleaning fires and so on.

460. But those who come on the Sunday are off on the Saturday afternoon?—Yes, sir, at 2 or 3 o'clock.

461. (*Mr. Richmond.*) Now, what wages do you get per week?—I get 6*s.* a day. It is by tonnage I am paid.

462. (*Professor Simpson.*) Now, is there anything else that the salt cake workers complain of, except what you have told us of—tightness of the chest?—No.

463. Do you suffer from diarrhœa or constipation?—Yes, sir.

464. Which most, diarrhœa or constipation?—Diarrhœa is the most.

465. You know what I mean by constipation, when the bowels are not moved for days or weeks?—No, sir, nothing like that that I have known of.

466. They suffer from diarrhœa then?—Yes, sir.

467. (*Chairman.*) Now, Mr. Burns, beyond the fact that if there could be a better draught from the kilns to the towers to carry off the gas, you think that the vitriol chambers should be kept in better order. Have you any other suggestion to offer as to improving the conditions of work?—No, sir, not at present; it would be no use my saying anything to them.

468. But we are here to see if anything can be devised practically, to make the work healthier, and anything that you can suggest we will take a note of. The masters will know nothing about your evidence now. You may speak quite freely?—There is nothing more at this present time.

(*Mr. King.*) Would you ask each of them if every chemical worker does not suffer from bronchitis and tightness of the chest, after working a time?

469. (*Chairman.*) Is it a fact that every chemical worker suffers more or less from tightness in the chest?—Yes, sir, they do.

470. You mean the men in your work?—I mean all the men in our work; we get it from the gas, which should be kept down, and is not kept down.

471. (*Mr. Fletcher.*) Did you ever think to tell the inspector when he came that there was a lot of gas floating about, and that it should be reduced?—I was told he was about, and I was told to keep the gas down as well as I could.

472. But did you ever complain to the inspector that there was a lot of gas which was injuring you, and which ought to be controlled?—No, sir, I never did.

E. Smee.

Edward Smee examined by—

473. (*Mr. Richmond.*) Where do you work?—At Kurtz's, sir.

474. What do you do?—Bleaching powder packing.

475. And how long have you worked at powder packing ?—I have been four years at powder packing. *E. Smee.*

476. And are still engaged at it ?—Yes, sir.

477. (*Chairman.*) How old are you ?—About 32.

478. (*Mr. Richmond.*) You go into the chambers, of course ?—Yes, sir.

479. Are you much affected by the gas ?—Yes, sir.

480. You wear muzzles, do not you ?—Yes sir, we have to wear muzzles, about five yards of flannel, but we get some chambers that no muzzle can keep the gas out, sir.

481. Is it gas which is in the chamber, or that which escapes as you disturb the lime, that you are affected by ?—The gas which is in the chamber.

482. Is it extra gas, or gas which comes off ?—Just what is stationary; it will not shift.

483. (*Professor Simpson.*) Do you wear the muzzle dry or wet ?—You must have it damp. It must not be too wet, or too dry.

484. A happy medium ?—Yes, you have it washed at night.

485. What do you wash it in ?—Soap and water, and scalded in hot water.

486. And then it is sufficiently moist. Will gas come through it still ?—Yes, in some chambers you could not keep it out. You would have to have that much flannel that you could not breathe through it, and it would be no use at all to you.

487. The chambers are opened before you go into them ?—Yes, for two or three hour sometimes.

488. And is not that long enough ?—Yes, sir, it would be if there was any ventilation in them, but there are some of them where they are not able to clear them.

489. And that compels you to go into the chamber when there is dangerous gas in it ?—We have to go in ours to get the work done.

490. Could you not leave it until it was clear ?—It would not clear itself in a day. Sometimes we have had to leave it until the next morning, or it would eat the face off you, you would be so burnt you could not stop in.

491. Do you grease your face before going in ?—Yes, sir.

492. Always ?—There are some who do not need to do it, but it is generally the case that you should do it every morning.

493. How long would you be at work at any one time in a chamber ?—Sometimes you might stop in a quarter of an hour.

494. Not longer ?—No, sir, but others you could be in for half-an-hour or an hour, some are not as bad as others.

495. Have you worked any others besides Kurtz's ?—I have packed an odd chamber in other places, but I never worked regularly anywhere else. I have packed a chamber at Sutton Lodge.

496. Do you feel the gas before you stir the powder ?—Just the same, it is just as bad.

497. Before you touch the powder ?—Yes, sir.

498. Is there not some means of carrying off the superfluous gas before you enter the chamber, is it not drawn off into another chamber ?—No, sir, not that I know of, I have not seen any.

499. Have you any lime distributors ?—Yes, we do put lime in.

500. That is distributed ?—Yes, sir.

501. Then they do put in lime to absorb the superfluous gas ?—Yes, sir.

502. (*Professor Simpson.*) Then they do use a distributor ?—Yes, sir.

503. Do you mean that it is not effectual ?—No, it does not clear all the gas, sir. As long as that chamber has been left open it is throwing off the gas all the time.

504. From the lime itself ?—Yes, sir, from the time you start packing until you have finished. It is as bad when you have only one tub in the chamber.

E. Smee.

505. And it is as bad before you begin, you say?—Yes, sir, and the same right up to the last tub.

506. Were the Sutton Lodge chambers as bad, or what?—I could not say, but the one I was in was not so bad as what I have got to do myself.

507. (*Chairman.*) What kind of better ventilation would you suggest? —Well, there should be a door at the other end of the chamber, to let the draught come right through, and the side doors should be left wide open. They can scarcely be opened, some of them.

508. Do you mean that there is a door at Kurtz's at one end only?—There is no door at one end, the doors are only at the sides, and you have not the draught coming through.

509. But there are three doors in the chamber?—Yes, five, indeed, in some of the bigger chambers.

510. And how many of those doors are opened before you go in?—They are all opened before you start packing, sir.

511. And the addition you propose is to make this other end door?—One more, so as to let more air in.

512. Have you suggested that to the manager or the master?—I have suggested it over 12 months since, when we had a bother there over a drop which was given us, and it has never been altered since.

513. How do you suffer from this gas?—Tightness on the chest, a feeling that you can hardly get your breath, and you have no wind to follow your work up.

514. How often do you feel this?—There is hardly a day goes over but I get a little or much of it, sometimes worse than others.

515. Anything besides tightness of the chest?—No, I feel nothing else.

516. Any bronchitis?—I feel that in the morning, sir, I cannot breathe in the morning.

517. That is no necessary proof of bronchitis?—It must be something of the sort, sir.

518. How do you know that you have bronchitis?—I do not know that I have it at all, but it is what I thought I have. I have been to a doctor with it, and have been getting medicine from a doctor.

519. Did he tell you what you were suffering from?—Bronchitis.

520. (*Mr. Fletcher.*) Now do you think that any better class of respirator could be found than what you use?—It might be a better pattern, but I do not know of any?

521. (*Professor Simpson.*) Do you always wear yours in the chamber? —You could not go in without them; you would drop, sir.

522. (*Mr. Richmond.*) Have you worked in the Deacons Chamber?—No, sir, never. I have seen them, but not worked in them.

523. Have you any idea which is preferable?—No, sir, I do not know.

524. As far as gas is concerned?—No, sir, when I saw them I did not understand the work at all.

525. In the Deacon chamber you stand outside and do not go into the chamber at all?—No, sir, but I have never seen them work.

526. What hours do you work?—Well, sometimes there are two chambers, and at other times only one. When there is only one chamber we could get that done in about eight hours, but if you have two, it may last over 12 hours.

527. (*Chairman.*) Does it take you as long as that to empty a chamber? —Not to empty them, but we have to start the lime again, and so on.

528. Is that the case in all chambers?—No, there are some places where they just finish the packing, and then go home. They do not lime in the Globe, or break down.

529. Now, as far as you know, do any of your fellow workers in the same department suffer in the same way?—There is not one but complains the same road, they are all touched.

530. (*Mr. Richmond.*) Do you know the Globe chambers? Have you ever been to the Globe chambers?—I have seen them from the outside.

E. Smee.

531. Have they doors at each end as you are suggesting?—Yes, sir.

532. The extra door which you suggest?—I do not know whether it is there, but they are not situated the same as ours. They run one by one along the straight, whilst ours are side by side, so that air can get into them from both sides, you see, in their chambers.

533. (*Mr. Fletcher.*) Is there some reason at Kurtz's for not putting in the end door?—Not that I know of.

534. (*Mr. Richmond.*) You cannot get the draught at both sides as at the Globe Chambers?—No, sir.

535. (*Professor Simpson.*) Do the men suffer at the Globe at all?—I do not know them, sir.

536. The position of the chambers you mean is better at the Globe than it is at Kurtz's?—Yes sir, it is.

537. (*Mr. Richmond.*) Now what wages do you earn?—Well, it is tonnage with us, sir.

538. What do you earn a week?—Sometimes we get 2*l.* and sometimes not 25*s.*

539. Well, what is your average?—About 36*s.* on an average. Our place is a slack place for working.

540. That is for six days' work?—Yes, sir.

JOHN PLANT examined.

J. Plant.

541. (*Mr. Richmond.*) Where do you work?—I am only cleaning schools now, sir.

542. You are not working at chemical works then?—I have not been working at chemicals for the last two years, I have not been able.

543. Where did you work?—At Kurtz's.

544. What department?—I was working the black ash till the last few weeks, and then I was labouring.

545. Then are you a caretaker now?—No, but me and my missus clean the schools, and get ready for the scholars.

546. What did you do in the black ash department?—I left the salt cake and went to the black ash to get rid of the gas, as I thought.

547. (*Mr. Fletcher.*) Were you working with revolver or hand furnaces?—I have worked both.

548. You used to work the salt cake?—Yes, sir, but by the doctor's advice I left it, thinking I could get rid of the gas, but I did not.

549. (*Mr. Richmond.*) What sort of gas did you get with the black ash?—All sorts: salt cake, burner gas, and others.

550. How has it left you?—It has left me so that I cannot breathe at all except it was a very light job. They found me a light job, but then that department stopped. The last day I worked there I was set picking up old iron round some stills, and I got a touch of the still gas and it laid me up for three weeks, and I never worked there since. When I went back they could not find me this same job again, and that department has never started since.

551. Is there anything in that black ash department, except the gas, that you object to?—I cannot say that there is anything in the black ash; it was the gas from the other departments.

552. (*Professor Simpson.*) How were you affected?—Tightness on the chest, and a very hard cough causing me to spit blood. Sometimes when going home I would take a fit of coughing in the street and drop as if I was dead, powerless and senseless.

553. In consequence of the cough?—Yes, sir, from the gas. On one occasion a policeman thought I was drunk, but I had not tasted.

554. And you were obliged to give up your work?—Yes, sir. Very likely if I had had a drop of whisky it would not have had that effect on me, but I had nothing to get it with.

J. Plant.

555. (*Chairman.*) Is there anything dangerous in the black ash department, as to wheeling barrows over the tanks, or anything of that sort ?—I have seen dangerous places a good while since, but I have not seen any lately, that I can say.

556. Have you wheeled barrows over the vats ?—Yes, sir.

557. Did you ever know of an accident through any one falling in ?—No, but I have often been near having an accident myself. I have let the barrow go in order to save myself.

558. What would you go into ?—Into liquor; it is liquid and black ash.

559. It is not liquid ?—Not until the water is put on. The liquid is on the top.

560. That is, it is covered with liquid, and would you come in contact with liquid before the black ash ?—Yes.

561. How broad was the gangway that you wheeled barrows on ?—From 1 foot 9 inches to 2 feet.

562 Not broader than 2 feet ?—No, say two full planks.

563. Have you seen any as broad as this table ?—No, sir, I have not.

564. Do you not know that there is a tramway running across them ?—I am speaking of the time I worked. There may be waggon roads across now.

J. Mullen.

JOHN MULLEN examined.

565. (*Mr. Richmond.*) Where do you work ?—I am working nowhere at present, sir. I have worked at the chemical works.

566. How long ?—Till about a month ago.

567. Were you working at chemical works a month ago ?—Yes, sir; and for the last 18 years.

568. Where at ?—At Gerard Bridge Works, Mr. Gamble's.

569. And you left about a month ago ?—Yes, sir, a month I have been out of work.

570. What department were you employed in ?—At both departments, both at the weldon process and the salt cake.

571. (*Chairman.*) Which of the two do you think the most healthy ?—Well, I think the weldon is, but you have not the same amount of work to do in the weldon as in the salt cake process.

572. Salt cake is the hardest ?—Yes, sir.

573. What do you work at in the weldon process ?—Looking after the stills, sir; but if I was getting a portion of the gas there I could save myself from it, and go some other way. The only remedy I see if you are getting chlorine gas, is for you to knock off work and take a rest and sleep it out of your bones. I have taken drink for it, but it never did me any good. It will ease you a little until you have a rest, and have had some sleep. Some nights coughing will come on, according to the chlorine you get.

574. (*Professor Simpson.*) Then the only cure, you think, for chlorine gas is sleep ?—The only remedy I can see for it.

575. (*Mr. Fletcher.*) It comes from leaks ?—There will be a blow sometimes, and you cannot avoid it. It is the still man's fault. Sometimes that gas has come out when the manager has been standing close to.

576. You were the still man ?—No, sir; not myself—I was at the salt cake. Mr. Wiles sent word down that he could not come, owing to his having caught chlorine gas by a blow from the stills.

577. You mean that it was due to something under the control of the men ?—He did not say anything to the men. He was going through the shed himself, and I saw him getting the gas; I saw him putting his handkerchief in his mouth.

578. Was that the fault of the man at the works, the stillman ?—It would be the stillman, sir.

579. He did not get his joints right?—Or he had no room to work it. *J. Mullen.*

580. Did you wear a muzzle?—I have worn a shawl at salt cake, but a man cannot wear it regularly. To do salt cake work he has to work hard, and can keep nothing round his mouth, at salt cake.

581. Did you used to wear the shawl?—Yes, sir.

582. Did you find much effect from the salt cake gas?—Yes, sir; I found effects from it. The men put things into their mouths, they call them bites, a sort of handkerchief. Some of them wear a bite, but I could not bear it, and wore a shawl tied round my mouth, but not holding it in my mouth.

583. Your teeth are gone, are they?—Yes, sir, it would go through a shawl.

584. Your teeth are gone and you attribute that to the gas?—Yes, sir.

585. That is, you attribute it to the gas you got in the salt cake?—Yes sir, I have lost many a tooth through getting chlorine gas in the salt cake, and when you got some of the gas it would throw you off your work for perhaps 10 minutes, and after that you could not fill this time up. When you are on piece-work, the master will expect you to do so much in the time, and if you do not do it he wants to know whose fault it is. The furnace does its work, and you have to move the cake away. It is bound to affect your breath all the time. I have worked nights and nights, and never touched my meat, I could not eat it.

586. You think chlorine gas is the worst?—Yes, sir, it is much the worst. Any man who is not eating his food is not doing justice to himself.

587. What wages do you earn?—It varies. I have earned 2*l.* a week at salt cake, and I have worked on it for 25*s.* It depends on the furnaces I am at. They are going out of repair and do not work as well, I suppose.

588. What do you place as your average?—I should say about 30*s.* a week. There are plenty that I know of in the same works not getting 25*s.*

589. You think your average would be 30*s.* a week?—Yes, sir, but I have known many a week when men have been off three or four days through getting the gas.

590. (*Mr. Fletcher.*) The object of this committee is to find out some remedy which can be adopted to prevent this injury. It is a defect that we deplore very much. It arises from small leakages in the pipes and stills, as we think?—No sir, I can tell you one reason for it. A certain portion of it comes from that, but at different times I have seen it since they came on this stilling system, the way they are working the stills now. The stillman is trying to get through his work when he gets a blow from one of the stills, which you could not get to quieten down for two or three minutes, and the force blows the lute out of the pipes.

591. If it blows the lute out of the pipes is it not because there is not water enough in it?—Yes, sir, I daresay that was so, but I have seen it blow what there was in it, and I have seen them put clay, stiff yellow clay, to keep the water in.

592. Would not the manager soon have that repaired and made deeper?—He could not if he would, as that would be a matter of stopping the works. The process might have to be stopped 24 hours.

593. But you do not want an Act of Parliament to make the lutes deep enough, if the lutes are not already sufficiently deep to keep the chlorine in. I believe that what you suffer from must be the small leakages which are likely to occur?—Yes, sir.

594. And they are stopped with this black cement which is in the hands of the stillman?—Then the kilns are close to the salt cake place, and they eat away holes in their covers. It may be two or three months before the men put patches on to them.

595. Why do not you complain to the stillman if he does not keep his still tight?—If the still man did not do his work and keep the acid

J. Mullen. down he would be in fault and they would get another man. This is not the still man's fault. He may be doing another job, and if he puts the cement on it may blow off, and there will be another little hole on this top. I have seen them like a riddle. It is suffering from chlorine gas that all these men are complaining of. I have known it myself.

596. (*Professor Simpson.*) Can you suggest any remedy for the chlorine in the bleach powder places?—No remedy, only to put you off your work and let you sleep. You may take a glass of whisky or of rum for it, and it will ease you for the time.

597. But is there any remedy for stopping it?—Yes, sir, but all the remedy I can see is their repairing these leakages, where it comes from.

598. I am speaking of the bleach chamber?—I never worked about the bleaching powder, not but about the salt cake and stills.

Mr. King. (*Mr. King.*) I should like to give evidence, sir.

(*Chairman.*) We have your evidence before us, the evidence taken before the Labour Commission, but if you wish to give any further evidence we shall be happy to hear it.

(*Mr. King.*) Yes, sir, I do, about preventable accidents and the unreliability of the statistics relative to the health of the men. The reason I brought this man Plant to-day was, that he is one of hundreds who have lost their health in chemical yards. They have then been driven out of the chemical yards and sent about their business, and after they have left and turned to something else, and in a year or two have died, and instead of their deaths being attributable to any diseases caused by the chemical works, they are put down as general labourers, and you cannot come to any conclusion with regard to chemical workers in consequence. I could illustrate that in the case of Dick Shone, who gave evidence before the Commission, and looked quite as healthy as these men. At the time he gave evidence I told them privately, and the secretary in particular, that the man would not live two years and he has since died. Immediately after he came out from the Commission they banished him out of the works altogether, and he died a bricklayer's labourer. Then I have known men who have lost both arms and legs by accidents which could be very easily prevented.

(*Chairman.*) We will hear any evidence you have to give as to preventable accidents, but all you have said so far will apply to any trade. A man going out of any trade is not registered as belonging to that trade, and we know the value to place on statistics. On the question of preventable accidents, if you tell us of any which might have been prevented, and give us the means whereby they can be prevented, we shall be glad to hear you.

(*Mr. King.*) There is a man who lost both legs, and is at present in the Prescot Workhouse. He was walking across a yard one night, when he fell into a well containing some machinery, and which was not fenced in, and lost both his legs. That was at Sullivan's. Now, immediately it became known that this accident had happened there they fenced in the machinery, and it is quite impossible for an accident of that description to happen there again.

(*Chairman.*) What kind of a machine was it?

(*Mr. King.*) It was an outside crank pit. It was not fenced in or covered over.

(*Mr. Richmond.*) But that is required absolutely by Act of Parliament, without our legislating for it.

(*Mr. King.*) If there was a man, what we might call a practical working man, to act under the inspector as sub-inspector to look after these things, especially such as the breaking of the plank which has been referred to, and things in connexion with these particular places, and I think the powder chambers should be more in the open, like the Globe, it would be better, so that the air should have access from every quarter, so as to take away the gas. I could not understand at first why they are worse in Kurtz's than at the Globe, and the work harder, but it is because the Globe yard is more in the open; the men said "Look at the open."

Mr. King.

a long time before I understood it. I think there should be some plan devised for giving more space. Land ought to be taken from the landlords by the employers compulsorily. At present it is too dear, and they are inclined, I think, to put their plant a little closer than they otherwise would if able to obtain land cheaper. I say for manufacturing purposes manufacturers should not be handicapped by all paying excessive prices for the land on which to build industrial works.

(*Chairman.*) I think the manufacturers will agree with you.

599. (*Dr. O'Neil.*) Had that man any business there who had his legs taken off?—He was going to the W.C., I think.

600. There was no water-closet there, and as a matter of fact he had no business there?—He declared to me that he was going out to attend to a call of nature when he tumbled into this crank pit. Then, during his illness while he was laying in bed (I tell the tale as it was told to me) the fireman came to him making all sorts of promises that they would see he did not want in future, and eventually got him to sign a paper practically contracting himself out of the Employers' Liability Act, and agreeing to take a certain sum. This may or may not be true, but I think the time ought to be extended to prevent men contracting themselves out of the Act in this fashion.

(*Chairman.*) Then now is your time for impressing that opinion on the Home Secretary, while the Employers' Liability Amendment Bill is before the House of Commons. You might take steps to make your views known, but we could not do that.

(*Mr. King.*) These men, too, will tell you that they are more susceptible to the gas when they are working a long time, the last two or three hours of the 12, than the whole 10 previously. I believe that if the hours of labour were shortened in connexion with chemical and copper works, the health of the men would be very considerably preserved. When they are bodily fatigued they are more susceptible to getting gassed.

(*Mr. Richmond.*) This is in favour of having eight hours?

(*Mr. King.*) Yes.

(*Mr. Richmond.*) Then what do you say about the reduction of wages in consequence?

(*Mr. King.*) Well, I do not think that the reduction ought to be corresponding, because I believe that if the men only worked eight hours they would be able to give more heart to their work, and more ready minds to it, and by that means do much more than they would be able to perform in the same space of time where they worked 12 hours.

(*Mr. Richmond.*) But take the case of a still, or anything like that in constant work, it cannot do more than a certain amount of work possibly, can it?

(*Mr. King.*) No.

(*Mr. Richmond.*) And it produces exactly the same amount whether it is worked by two sets of men at 12 hours each set, or by three sets at eight hours each?

(*Mr. King.*) Well, I would not like to say that it would not produce more with three sets. Mr. Brunner told me he was better satisfied with the men having eight hours instead of 12, and the loss did not much affect the men, who had 4*s.* 1*d.* a day, and I think he took off the odd penny.

(*Mr. Richmond.*) But you must bear in mind that Brunner, Mond, & Co. are a very successful company, and pay large dividends, but you have to deal with the case of works which are not making very large profits also, and you cannot expect masters to run their works at a loss, can you?

(*Mr. King.*) No, certainly not.

(*Mr. Richmond.*) And you have got to meet that fact that stills can only produce a certain amount, and the cost of production must be met.

(*Mr. King.*) Yes, but I think that could very easily be met by a board of conciliation and arbitration on a sliding scale, which could be very well adopted.

(*Chairman.*) Do not you think that members of unions could bring that about? They have brought it about in some trades.

Mr. King.

(*Mr. King.*) I am a member of the Liverpool Board, and the other day there were two cases where the men were willing to submit to arbitration, but the masters would not, and I do not think they will submit to arbitration until they are compelled to do so.

(*Professor Simpson.*) Supposing that you were manufacturing an article against the competition of France and Germany, do you think you would be willing to concede eight hours, and give the men the same wages?

(*Mr. King.*) Certainly not. If I was convinced that such was the case, certainly not. I certainly would say the first thing in the minds of the working men should be to look and see that they were not interfering with the trade of the country, or unduly hampering it, and giving a preference to the foreigner.

(*Professor Simpson.*) That is sometimes forgotten, I think.

(*Mr. King.*) It may be, for at the times when there is conflict between masters and men it is practically war, and they do not take these matters into consideration. But I think if the more thoughtful men met together, and the masters said we will arbitrate, or in any way showed a willingness to give and take, the men would listen to it, and we should not have the strikes taking place that we have had.

Mr. King then stated that he had three witnesses present from Widnes.

The Chairman thought that if the witnesses worked in the same departments as the witnesses already examined it would be unnecessary, and one of them, Mr. Healey, had already given evidence very fully before the Commission. This Committee also intended to visit Glasgow in a week or two, to see both masters and workmen, and to visit the works for themselves.

(*Mr. Fletcher.*) The question is whether certain rules can be adopted which would benefit the men in preventing accidents. Anything personal to the men we leave them to deal with themselves. The general question of the condition of the chemical trade is a very large one. We know that the chemical works are not drawing-rooms or bowling greens, but the question is, can we adopt some regulations which shall benefit and help the men in the work which they carry on.

(*Mr. Richmond.*) You see this is an inquiry solely on account of the Factory Act Department. Mr. Fletcher, who has charge of the question of alkali gases, and so on, is attached to quite a different department altogether. In fact it is not a Home Office matter at all. There have been rules adopted with regard to keeping down gases.

(*Mr. Fletcher.*) Yes, that is what the inspectors are all busy about.

The Chairman asked whether, after what had been stated, Mr. King still wished these men to be examined?

(*Mr. King.*) Oh, certainly not, if you do not think it necessary.

(*The Chairman.*) I do not think any good would come of it, or we would do it with pleasure.

The proceedings then closed.

Date of Application, 22nd Nov. 1888.
Specification accepted, 15 Jan. 1889.

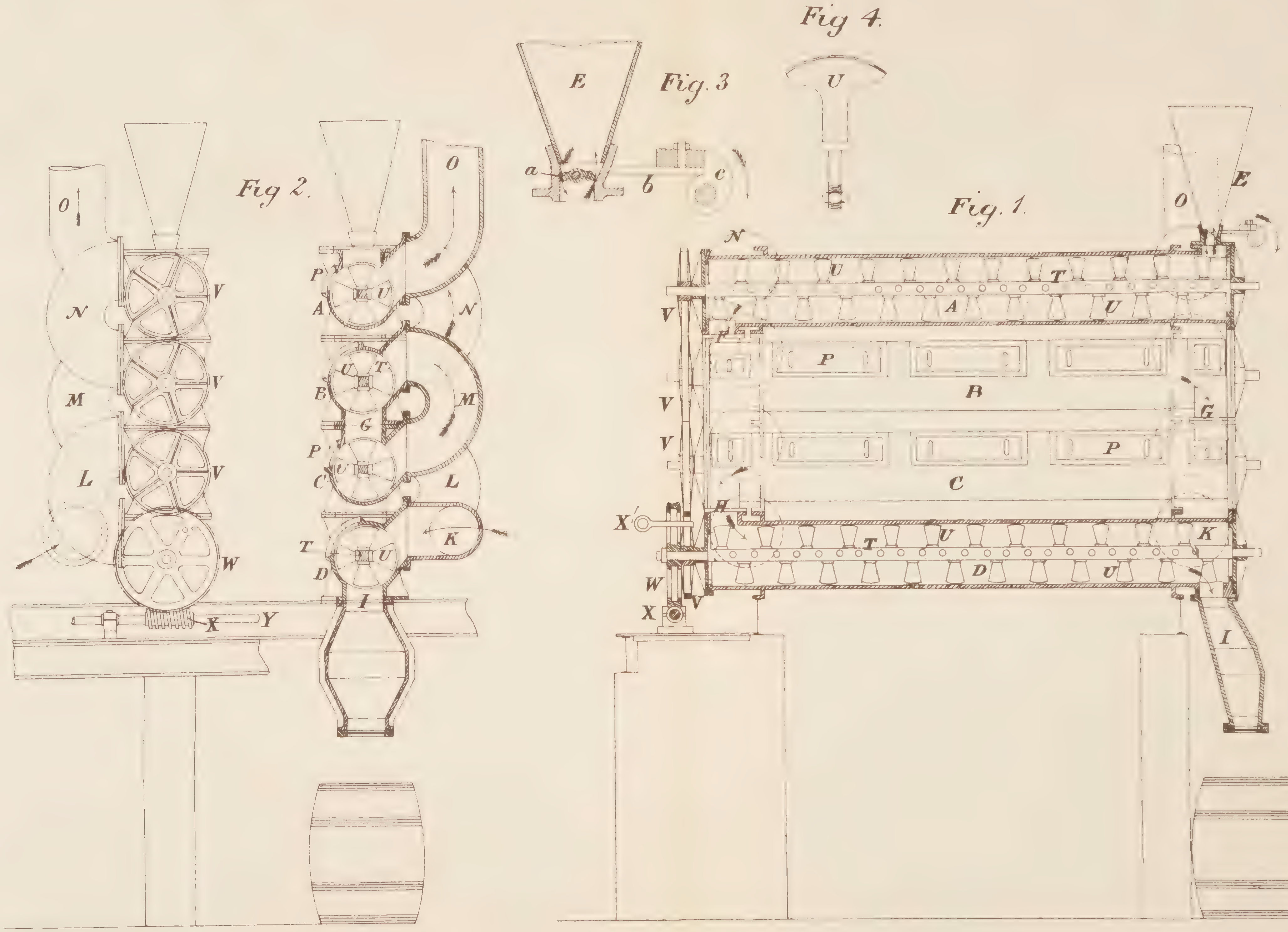
A.D. 1888, 22nd November. No. 17,012.

COMPLETE SPECIFICATION.

Improved Apparatus for subjecting Pulverulent or Granular Materials to the Action of Gases.

I, Robert Hasenclever, of The Chemische Fabrik Rhenania, Aachen, Germany, General Director, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

(1 SHEET)



[This drawing is a reproduction of the Original on a reduced scale.]

Judd & C° L^td, Lith. 63, Carter Lane, 5730. -J. 94.

My invention relates to an improved construction of apparatus for subjecting pulverulent or granular materials to the action of gases, such for instance as for the absorption of chlorine by lime in the manufacture of chloride of lime, which apparatus consists mainly of a series of horizontal or slightly inclined closed channels or tubes arranged either one above each other or side by side, and each provided with stirring and propelling apparatus, the said tubes being made to communicate with each other and with a gas supply, in such a manner that the pulverulent or granular material fed into one end of the first tube is caused by the stirring and propelling apparatus to pass consecutively through all the tubes, while at the same time the gas with which the material is to be treated is made to enter the last tube and to pass consecutively through all the tubes in the contrary direction to that in which the material travels, this being brought into intimate contact with the gas during its transit by means of the stirring apparatus.

On the accompanying drawing is shown a construction of the above-described apparatus more particularly suitable for the absorption of chlorine gas by lime. Fig. 1 shows a sectional side view, Fig. 2 shows in end view and cross section, and Figs. 3 and 4 show enlarged details. A B C and D are a series of superposed pipes of which a greater or less number can be used, according as the quantity of gas to be absorbed is great or small.

Each tube contains a stirring and propelling apparatus consisting of a shaft T carrying a number of oblique radial blades U which are by preference widened out at the end, as shown at Fig. 4 so as to afford considerable surface for raising and propelling the lime. The ends of the shafts T are carried in bearings in the end covers of the tubes, as shown, and they are each provided at one end with a spur wheel V, such wheels being all made to gear with each other as shown. On the lowest shaft is a worm wheel W gearing with a worm X. The worm wheel W is loose on the shaft T, but is connected thereto by a pin X^1, passed through holes in both V and W when it is desired to work the apparatus, the rotary motion thus imparted to the bottom stirring apparatus being connected to the upper ones by the gearing V.

When it is desired to stop the motion of the apparatus, the pin X^1 is withdrawn.

The lime is charged into the one end of the top tube A through the hopper E, and is caused by the blades U to travel slowly to the other end, where it falls through a branch pipe F, connecting A with B, into the latter. Here it is conveyed back to the other end of the tube, where it falls through a connecting branch G into C, and so on, the lime being made to pass from C into D through the branch H and being eventually discharged through a shoot I into a suitable receptacle, or a transporting worm, that collects the lime discharged from a number of such apparatus.

The chlorine gas is made to enter the lowest tube D at the discharge end through a lateral inlet K, and in flowing through the same is brought into intimate contact with the lime as it is raised up by the stirrers. From the other end of D the gas rises through the connecting branch L into C, and in like manner through the branches M and N successively into B and A, the unabsorbed portion of gas, if any, passing off from the inlet end of A through the branch O. The gas might also be made to enter the several tubes through the same branches F G H through which the lime descends, but in order to prevent the gas from carrying too much of the lime dust with it, it is preferred to admit it as described.

The hopper B has, as shown at Fig. 3, a description of throttle valve *a* which receives a reciprocating motion as indicated by the arrows by means of a weighted arm *b* and revolving cam *c* so as to alternately open and close the hopper-opening, and thus produce a regular discharge of material from the hopper.

For observing the action of the stirrers, the tubes A B C D are formed on one side with openings which are closed tightly by covers P, which can however be readily removed when it is desired to inspect the interior of the tube, or for cleaning the same.

Having now particularly described and ascertained the nature of this invention and in what manner the same is to be performed, I declare that what I claim is:—

1. Apparatus for treating pulverulent or granular materials with gases, consisting of a series of closed tubes communicating with each other alternately at opposite ends and containing revolving, stirring, and propelling apparatus so arranged that the said material fed into the one end of the first tube is caused to pass consecutively through all the tubes, and is at the same time stirred up so as to be brought into intimate contact with the gases flowing through in the contrary direction, substantially as herein described.

2. In apparatus for treating pulverulent or granular materials with gases, the combination of closed tubes such as A B C and D having closed sight holes such as P and connected together by branches such as F G H, stirring and propelling apparatus consisting of a shaft T with stirring blades U, an inlet E for the pulverulent material and an outlet for the gases at one end of the first tube and an outlet I for the pulverulent material and an inlet K for gas at one end of the last tube, substantially as herein described with reference to the accompanying drawing.

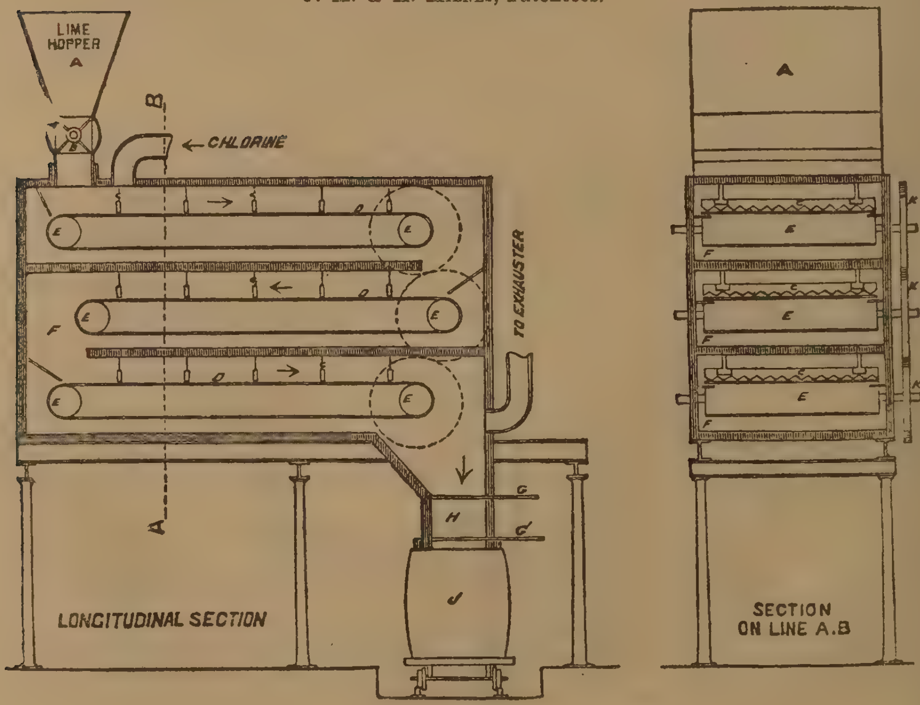
Dated this 22nd day of November 1888.

Abel & Imray,
Agents for the Applicant.

IMPROVEMENTS IN THE MANUFACTURE OF BLEACHING POWDER.

Patent Automatic Continuous Producing Chamber, A.D. 1891, No, 15,833.

J. M. & A. Milnes, Patentees.



Description of Drawing.

"A" is a hopper receiving the ground slaked lime intended for chlorine saturation. "B" is an automatic admission valve, so arranged that the quantity of lime admitted into the chamber can be increased or diminished at will. "C C C" are combs suspended from the chamber divisions over each belt for the purpose of regulating the thickness of the layer of lime, and also to turn over the lime as it is being carried along by the travelling belt, thus presenting continual changes of faces in the lime layer exposed to the action of the saturating gas. "D D D" are the endless travelling belts of asbestos cloth running over the cylinders "E," placed one at each end of the travelling belts. "F" is the chamber, built preferably of slate slabs, and divided into three or more compartments or divisions. "G" "G[1]" are dampers for respectively admitting the saturated lime (bleaching powder) into the receiving chamber "H," and from it into the packing cask "J." "K K K" are spur gear wheels for driving the travelling belts "D D D."

Method of Working.

The machine is so simple in construction and manipulation that the drawing pretty well explains itself. The lime intended for saturation is elevated into the hopper "A," from whence it is admitted on to the first travelling belt by means of the valve "B." The first belt carries the lime from the left to the right end, where it falls upon the second belt, and is carried from the right to the left end; here it falls upon the third belt, and is carried again from the left to the right end, where it falls upon the first damper "G," from whence it is admitted into the receiving chamber "H," the speed of the travelling belts being so regulated that the material shall be saturated with the gas up to the required commercial strength. The upper damper "G" is then closed, and the lower damper "G[1]" is opened, admitting the saturated lime, which is now chloride of lime (bleaching powder), into the packing cask, which is then headed up and passed for shipment.

The present Method of Manufacture.

The method of manufacturing bleaching powder as at present conducted is as follows:—

A chamber of lead sheets, supported and strengthened by timber supports, is erected as a rule on a level with the ground, usually from 30 to 50 feet long by 20 to 30 feet wide, and about 5 to 6 feet high. This chamber has doors at each side, through which the lime is wheeled in barrows, and is then spread by means of rakes over the surface of the floor. When the floor of the chamber is covered all over, the doors are closed and the chlorine gas is admitted through a pipe on the roof of the chamber. When the lime is partly saturated the doors are opened and men enter the chamber, and with rakes proceed to turn over the lime, in order to present fresh surfaces to be acted upon by the gas. This operation being completed, the doors are again closed and the gas is again admitted. The chamber is left closed until such time as the lime becomes saturated with the gas up to the required commercial test strength. When this has taken place the doors are once more removed, packing casks are rolled into the chamber, and men enter and with shovels pack the bleaching powder into the casks. It will be easily seen that these three operations of (firstly) spreading the lime on the floor of the chamber, (secondly) the raking over when the lime is partly saturated, and (thirdly) the packing of the finished bleaching powder into the casks, entail a considerable amount of hand labour. Moreover, the two last-named operations are highly prejudicial to the health of the operatives (as shown by the evidence given before the Labour Commission), and also a considerable cause of nuisance to the communities in the immediate vicinity of the factories where the manufacture is carried on.

Objections to the present Method.

The objections to the present primitive method of making bleaching powder are many. That the workmen suffer very considerably there cannot be any doubt, and to illustrate this we give a few extracts taken from the evidence given before the Royal Commission on Labour.

(*The figures indicate the number of the question, and the extracts are from the authorised report of the "Minutes of Evidence."*)

Mr. George Mitchell, Secretary to the Labour Literature Society of Glasgow, replying to Mr. Mundella, says as follows:—

21,227. You think a vitriol burner ought not to work more than six hours a day?—Yes.

21,228. Any other workers who should be restricted to six hours a day? —Those who work in the bleaching powder department ought to be restricted to that.

21,229. They ought to be restricted to the six hours a day?—Yes.

21,230. Are there any that ought to be less than six hours a day?—Of course I am not prepared to say that any ought to be less. *If by some means of compulsion the employers had to use every method, every invention which is adopted, which has the object in view of making the work as sanitary as possible, then probably six hours a day would not tax them quite so much as even three under the conditions under which men have to work placed as they are at the present time.*

21,273. Now as to the sanitary conditions, what do you say to them? —(After describing the unsatisfactory state of the ventilation in the works, the witness goes on)—it is no uncommon occurrence round about the district of a chemical works that for probably, say a quarter of a mile, you will find the smell of the gases so strong that at times those not accustomed to it will find their eyes watering.

21,277. Do you think that the average death-rate is worse amongst the chemical workmen than amongst the ordinary workmen?—Taking the per-centage of the men who keep working at the chemical industry, it is much higher—terribly higher, in fact.

Examined by Mr. Livesey.

21,312. Then the work of the bleaching powder makers; is that continuous?—No, it is not quite continuous. The time they are at it, though, *their work is physically very hard, and they are in a very stifling atmosphere of chlorine.*

Examined by Mr. Tom Mann.

21,454. Are you familiar with the bleaching powder department?—Yes, fairly well familiar with it from my being always in it, more or less.

21,455. What about the conditions that obtain there, are they fairly healthy?—No, not healthy.

21,456. Are they very unhealthy?—Very unhealthy, from the fact that *one not accustomed to it at certain times may pass the bleaching chambers, and if the gas has not time to get away, it will so catch him that he may drop down.*

21,463. Is that the department where the muzzle is worn?—Yes, the muzzle is worn in that department.

Mr. Thomas Steel, representative of the Tyneside and National Labourers' Union.

Examined by Mr. Mundella,—

With reference to the use of the "muzzle" alluded to by the last witness. (*This "muzzle" is composed of layer upon layer of flannel to the thickness of six or more inches.*)

21,610. What proportion of your men use these muzzles?—Every man in the bleach works has to use one, he could not work without it. . . . They make a filter very often by putting a large piece of flannel folded up several times into their mouths and biting it and drawing every breath

through that, or when they are going to be continuously at work they get a large pad. I believe you have seen the muzzle—and they put it over their mouths, and they have to draw the whole of their breath through that, which is, of course, a great strain on the chest.

21,611. That applies to the bleaching powder chiefly, does it not?—Yes, chiefly.

Examined by Mr. Tom Mann.

Mr. Steel, in answer to a question as to whether he would advise the use of certain mechanical means, says (21,684) *Certainly, and if anything better can be got afterwards have that too,* anything that would remove any of the superfluous gas. In the first instance it should not be allowed to get into the exterior atmosphere at all, that is against the Alkali Act, I believe; and secondly it is a loss; and thirdly it is injurious to health.

Mr. P. Healey, Mr. R. Shiel, and Mr. J. Casey.

Examined by Mr. Mundella.

22,496. (*To Mr. John Casey.*) What departments have you been in?—Only the bleaching powder.

22,497. How many hours a day do you work?—Between six and seven.

22,502. Do all the men engaged in powder packing work only six or seven hours a day?—Some work under.

22,503. You say that is as much as you can perform?—Yes.

22,504. Will you explain why it is that you cannot work longer?—I can just show you how I have got to work (*producing muzzle*).

22,505. That is your muzzle through which you inhale when you are packing?—Yes.

22,506. And do you wear that all the time?—Not all the time. Sometimes we cannot keep it on five minutes. Sometimes we keep it on for twenty minutes.

22,507. When you are in the act of *packing* you are obliged to keep it on?—*Certainly. I should be suffocated altogether if I did not keep this on.*

22,508. And have you ever suffered from your work?—Yes. I have been cut and burnt with the bleaching powder on my chest.

22,509. And you work in a muzzle? I suppose you wear goggles also, do you not?—Yes.

22,510. To preserve your eyes?—Yes.

22,513. How does it affect you, in the chest?—Yes.

22,514. Your work is spade work, is it not, chiefly?—*Yes, it is all spade work.*

22,515. What you suffer from is the escape of chlorine gas, I suppose?—Yes, that is what we suffer from. *When we go into the chamber, sometimes we are not able to stop in the chamber five minutes, sometimes a quarter of an hour, sometimes half an hour. Sometimes you cannot stop two minutes.*

22,515A. On account of the amount of gas?—Yes, it is inside the chamber.

22,554. (*To Mr. Carey.*) You heard the evidence of the previous witnesses?—Yes.

22,555. Do you generally agree with what they have said to us?—Yes.

22,556. Have you anything further you would like to state to the Commission?—I have got the muzzle with me. (*Witness put on the muzzle.*)

22,557. *Whenever you are packing in a hot chamber you are obliged to use that?—Yes.*

22,558. *And no man could enter the chamber without it?—No, they could not put their noses inside.*

22,559. It is nothing but ordinary flannel?—Yes.

22,560. Several folds of ordinary flannel?

(*Mr. Shiel.*) Yes. It has to be the best flannel—it has to be renewed—it gets eaten away with the gas.

22,561. And six or seven hours a day is as much as a man can work at that sort of work?—Yes.

22,562. When you enter the chamber you work for a few minutes at a time as long as you can and then come out?—Yes, sometimes we stop ten minutes, sometimes twenty minutes.

22,564. Then about twenty minutes is the longest time you can stay in the chamber, is it?—Yes.

Though much more evidence is given, the foregoing will be sufficient to indicate that the present method of manufacture is highly objectionable on the grounds stated, viz., of being needlessly expensive and very dangerous to the health of the operatives, and also the cause of serious nuisance to the surrounding neighbourhood of the bleach factories.

Some little time ago a trade journal sent a special commissioner to St. Helens, in Lancashire, to report upon the nature of the work of chemical operatives, and in an article under the head of "British Slaughter-Houses," speaks as follows with regard to the workers in the bleach departments:—

"The duties of the powder packer consist of filling casks with bleaching powder. To do that he has to enter the chamber, which for several days past has been charged with the chlorine gas. Though the worst of the gas has been allowed to pass out of the chamber before the packer enters it, the atmosphere is still charged with the deadly fumes. The heat is something tremendous, especially as the poor wretch who has to endure it is swathed about the head in a way that would protect him from arctic cold. How does the packer protect himself? Ten years ago he simply wound a few folds of flannel round his mouth, which sufficed to filter the air through. The strength of the gas then was nothing like what it is now. As the eyes were unprotected, and they are very sensitive to contact with the chlorine, the packers in former times, however, stayed for a shorter time in the torture chamber than they do now. Besides this the chambers were smaller, so that the work per man was less than now . . . . . Before he approaches his work now the man gets himself up in the fashion depicted in the photo. He wears a round paper cap; his eyes are covered with a pair of enormous goggles. Then comes the muzzle. This formidable respirator is composed of twenty-six folds of flannel, wide enough to cover the space from the upper lip to the neck. This is lashed tightly under the chin and round the neck with cords. No space on any account must be left through which the horrible chlorine may find its way to the mouth. The ruts in the flesh which are cut by cords not infrequently afford an inlet for the gas; if the muzzle is replaced after an interval for breath over the ruts instead of exactly as it was before, with the cords fitting into the grooves in the flesh, the man will be 'gassed.' When the muzzle is on, the effort of breathing appears to be most painful even in the open air. The chest heaves like that of a man struggling for breath in the violent stages of lung disease.

"*The appearance of the face of the muzzled man gives you an impression, which you cannot shake off, that he is being suffocated*; *the eyes seem distended as they stare out through the goggles; the veins of the forehead are swollen and the flesh is puffed up in a scarlet ridge round the top of the muzzle.*

"I ought to have mentioned an additional precaution which is taken before the muzzle is put on. The men grease themselves thoroughly all over their face and neck, and wherever the skin is exposed. Round their legs they tie paper closely, and in these gaiters, with their feet encased in thick wooden clogs, they step into the powder. It is like stepping into the flames; for although they shovel a clear place to stand in, the feet and legs are exposed to tremendous heat.

"Their arms, in spite of the grease, frequently bleed. 'Let me see,' I said to one of the packers, who in a quiet matter-of-fact way was giving me his version, 'pull up your sleeve.' He hadn't been working for a week, he said, so that the arms were nearly well. They were covered with little half-healed scars, where the corrosive stuff seemed to have burnt in.

The packers' arms are in a chronic state of inflammation. To use their own expression, 'they are on fire.' At night they cannot keep them under the bedclothes.

"'*What is it like, being gassed?' I asked the man. 'Like having a hot poker shoved down your throat,' was the answer. 'You feel done for. 'Whether you lie by for a day or longer, it takes you fully a week to get 'over it. Sometimes your mate will help you out with your share, and you 'stay about and make a show of helping, but it is no good. When the stuff 'has got down your throat, you can't eat anything. If you manage to 'swallow a bit, you vomit it up again directly. All you can take is drink '—whisky is the best thing.*'

"'But you old hands don't get gassed, do you?' I queried. But I was mistaken. Every man is liable to a visit of the gas right through the muzzle. Gassing is such a common matter, that the men describe its symptoms as they would tell you what their Sunday's dinner was like.

"'Is it ever fatal?'—'Yes, sometimes.'

"The length of time which has to be passed in the torture chamber cannot be stated exactly. There is so much work that has to be done in the time, and each man sticks at it as long as he can hold out. The amount of work, as I said above, has been increased of recent years by the devilish application of the piece-work system. Then whilst he goes out to recover himself, his mate takes a turn. Perhaps a 100 yards may have to be traversed to the hut where the grease and water are kept, and really fresh reviving air is not to be had anywhere inside the works. Usually the spell of rest is no longer than will allow the packers to fetch their wind again, get a blow through their noses, or unloose the muzzles and repeat the greasing process. Frequently the men are on duty 12 hours; in some places they are allowed to escape after eight or nine hours of it.

"The man who lent me his muzzle was in his working togs, wooden clogs, paper leggings over his trousers. I got him to give me his clothes bill for a fortnight. The items are as follows. They were checked by a number of other men, and are under rather than over the mark:—

	s.	*d.*
5 cotton shirts at 1*s.* 2*d.*	5	10
1 pair of clogs in three weeks at 3*s.* 6*d.*	2	4
1 singlet at 3*s.*	3	0
1 pair trousers, with patchings, at 3*s.*	3	0
Flannel for renewing muzzle	1	0
	15	2

"These particulars were somewhat staggering, but the packer asked me to look at his clothes. His shirt was torn, I noticed, and in several parts hung in strips. It was hardened by the acid or powder, and tore freely wherever one laid hold of it. This shirt had seen two days' work, and was now good for nothing. Through the rents the chlorine gets at the flannel singlet and attacks that. His trousers were held together by some rough patches. Patching clothes is, however, out of the question as a rule. I tried to get a pin through the shirt but the stuff was so caked and stiffened with the sweat and powder that it was like pushing it through plaster. 'Besides,' said the men, 'we can't ask our wives to patch our clothes. The acid gets at the ends of their fingers and burns them. There is nothing for it but to be continually buying fresh things as the old ones give out.'

"As I said last week no definite period of work is assigned to the packers. They must work when they are wanted, that is when the chlorine chambers require to be emptied. I believe that on the Tyne the packers do not exceed four hours a day. The St. Helens men would be delighted indeed if they could have the limit drawn there.

"There is probably no calling in the whole sphere of industry so terribly trying as the powder packers. *No one denies this, but hitherto no one has taken the trouble to make things as easy as humanity demands for these*

sorely tried men. Does any one mean to say that mechanical ingenuity is baffled at this time of day in devising a means whereby work may be done even in the suffocating chlorine chambers with a sufficiency of air? If a premium of 100*l.* were to be offered by the alkali magnates, there would be chlorine diving suits put together in no time, with proper air pumps and an anti-corrosive coating which would resist the rasping and tearing of the dust and gas. The directors might do worse than keep the photo of the powder packer's head, which appeared last week, on their breakfast tables and in their boardroom, just as a reminder."

Press Extracts.

"Paper Making," the recognised organ of the paper trade, says (February 1st, 1892), in an article describing Messrs. Milnes' patent chamber, "We give below an outline of an improved chamber constructed "for the impregnation of lime by chlorine gas. In the usual chambers "the lime is spread upon the floor, and the chlorine gas is allowed to "fill the chamber and to remain therein until absorbed by the lime. "Then the side doors of the chamber are opened, and the lime is turned "by hand by men who are naturally more or less choked by this very "disagreeable job. Then, after again being submitted to saturation by "fresh chlorine, the operation is concluded, and the men have again to "enter the chamber and fill casks with the bleaching powder. Our "readers will not be surprised to know that this is a very hard task for "the workmen concerned. By Messrs. Milnes' patent chamber *all the "hand labour is done away with.*" After describing the working of the chamber, the writer concludes by saying, "The whole affair is extremely "simple and not expensive to erect. *The relief afforded to the operatives "is our great matter for consideration, as well as the saving in cost of pro-"duction of bleaching powder packed in casks and ready for heading.*"

"The Chemical Trade Journal" (September 3rd, 1892) says:—"One of "the chief points upon which the arguments in favour of shorter hours "in the chemical trade are hung, is the arduous and trying occupation of "those engaged in the production and packing of bleaching powder. *Any "improvements which will enable manual labour in this particular depart-"ment to be reduced to a minimum will, therefore, in the majority of cases "be eagerly sought for by managers for innumerable reasons.* We take this "opportunity of calling the attention of those whom it may interest to "the recent patent of Messrs. J. M. and A. Milnes. This patent consists "virtually of an automatic bleach chamber. Although the apparatus is "designed to affect the saturation of any solid material with gases or "vapours, we shall confine our attention to the application of this "apparatus to the absorption of chlorine gas by lime for the production "of bleaching powder." After describing the machine, the article goes on: "The apparatus, as will be seen from the drawing, is so simple "that it is quite unnecessary to give any explanation of the method of "working."

Advantages claimed.

The advantages we claim for our machine over the present method of producing bleaching powder are briefly as follows:—

A. The lime being introduced into the chamber automatically, we *save the cost* of the hand labour incurred by men having to enter the chamber to spread the lime upon the floor.

B. That the lime requiring no further attention from the time of entering the saturating chamber it until arrives at the receiving chamber ready for admission into the casks (the turning over being accomplished by the combs) *the expense of intermediate handling is avoided.*

C. The expense of *hand packing is saved* as the bleaching powder is simply admitted from the receiving chamber into the casks, and requires *no further handling beyond the heading of the casks.*

D. The compensation to the operatives for destroyed and extra clothing is likewise avoided, as also allowances for illness.

E. The saturating chamber being practically sealed there is *no escape of chlorine into the surrounding atmosphere.*

F. The production of bleaching powder by our method becomes *continuous instead of intermittent,* as at present.

NOTE.—Upwards of 150,000 tons of bleaching powder are made annually in Great Britain alone.

J. M. MILNES,
Mechanical and Chemical Engineer,
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London, E.C.
A MILNES, M.A., F.S.S.,
Her Majesty's Civil Service,
22A, Goldhurst Terrace,
South Hampstead,
London, N.W.
} Patentees.

THE UNITED ALKALI COMPANY, LIMITED (ST. HELEN'S DISTRICT).

STATEMENT showing the HOURS of ATTENDANCE of the WORKPEOPLE in the different DEPARTMENTS, and TIME SPENT in actual WORK, and REMARKS on the NATURE of the WORK, &c. SICK AND ACCIDENT CLUB (GLOBE WORKS), and DEATH-RATE, &c.

VITRIOL DEPARTMENT

Burnermen:

Average hours of attendance	84 per week.
,, ,, spent in actual labour	28½ ,,
,, wages paid	32*s.* 6*d.* ,,

(Muzzles not used in this department.)

SALT CAKE DEPARTMENT.

Potmen and furnacemen:—

Average hours of attendance	68½ per week.
,, ,, spent in actual labour	51 ,,
,, wages paid	32*s.* 6*d.* ,,

(Muzzles not used in this department.)

The boilermen referred to Mr. King's evidence in connexion with this department have no existence.

BLEACHING POWDER DEPARTMENT.

The processes under this Department are:
(*a.*) Chlorine still working.
(*b.*) Neutralizing.
(*c.*) Blowing or manganese recovery.
(*d.*) Lime dressing.
(*e.*) Bleach packing.
(*f.*) Knocking down.
(*g.*) Heading up casks by coopers.

(*a.*) Chlorine stillmen:

Average hours of attendance - - - 71 per week.
Work extremely light—viz., opening and shutting taps.
Average wages, 1891 - - - - 35*s.* per week.
(Muzzles not used here.)

(*b*.) Neutralizers :

Average hours of attendance - - - 71½ per week.

Work very light.

Average wages, 1891 - - - - 25*s*. 6*d*. per week.

(Muzzles not used here.)

(*c*.) Blowers and limepot men :

Average hours of attendance - - 70 per week.

Average wages, 1891 - - - - 34*s*. ,,

(Muzzles not used here.)

(*d*.) Lime dressers :*

Average hours of attendance - - - 63 per week.

Average hours spent in actual labour - - 30 ,,

Average wages, 1891 - - - 45*s*. 2*d*. ,,

(Muzzles not used here.)

(*e*.) Bleaching powder packers :*

Average hours of attendance - - - 30 per week.

Average hours spent in actual labour - - 15 ,,

Average wages, 1891 - - - 68*s*. 6*d*. ,,

(Muzzles are used by the men in this operation.)

(*f*.) Knocking down :

Average hours of attendance - - - - - 48 per week.

Average hours spent in actual labour - - 30 ,,

Average wages, 1891 - - - - 30*s*. ,,

(Muzzles are used by these men.)

Pearl Hardening Department.

Average hours of attendance - - - - 56½ per week.

,, wages - - - - - - 23*s*. ,,

Work very clean, and not laborious.

(Muzzles not used in this process.)

Copper Extraction Department.

Average hours of attendance - - - - 68 per week.

,, ,, actual labour - - - - 30 ,,

,, wages - - - - - 35*s*. 6*d*. ,,

(Muzzles not used.)

Artizans.

Hours of labour - - - - - 56½ per week.

Average wages - - - - - - 35*s*. 6*d*. ,,

Labourers.

Hours of labour - - - - - 56½ per week.

Wages range from 17*s*. to 24*s*. per week.

The hours of attendance, except in the case of the artisans and labourers, include meal times.

Of the total number of men engaged in manufacturing operations, only about 2½ per cent. wear the muzzles, and the necessity is not imperative, except in the case of the bleach packers.

To explain the conditions under which bleaching powder packing is performed, a description of the bleaching powder chamber may be of assistance. The chambers vary very much in size as regards length and breadth, but the height is nearly in all cases about 6¼ feet.

The chamber is formed of sheet lead attached to a timber frame work. There are one or two doors at the ends of each chamber, which serve the double purpose of charging the chamber with lime and ventilating it before packing. The structure is supported on cast-iron columns or brick pillars at a height about 6½ feet from the ground.

* In the case of lime dressers, packers, and knockers-down, the Globe Works have been taken, as these are the only works in the district where the duties are distinct and divided.

The chamber bottom is supplied with shutes, which are connected with casks placed on the ground floor to receive the bleaching powder. The connexion between the shute and the cask is of calico, to prevent loss of the powder.

The space underneath the chamber is not enclosed, so that there is nothing to impede a free circulation of air.

In the manufacture of bleaching powder, after the lime has been saturated with chlorine, any excess of the latter is drawn off over the freshly-lined chamber. The atmosphere of every chamber about to be packed is tested for the quantity of chlorine present, and the doors are not allowed to be taken down until the quantity of chlorine is reduced to under two grains per cubic foot.

After the doors are taken down, the packers do not enter the chamber until it has been thoroughly ventilated, and the only gas with which they have to contend is the small quantity held interstitially or mechanically by the thin layer of bleach to be packed.

This small quantity of gas is effectively intercepted by the flannel muzzles. The men wearing these muzzles suffer no inconvenience when habituated to their use. The position of bleaching powder packers is always in requisition, and with men of temperate habits is one of the most healthy occupations in connexion with the chemical industry, and will compare well with those in other industries.

Of the other men who wear muzzles, viz., knockers-down and the coopers who head up the casks. The work of the knocker-down is to strike the cask with wooden mallets, so that the powder may settle down in the cask, and the package hold its full quantity. The work is carried out underneath the chamber, where there is a free circulation of air, and the muzzles are worn to intercept the bleaching powder dust.

Heading up casks by coopers.—This work is carried out in Lancashire under conditions altogether different to those described by Mr. Girling in his evidence before the Royal Commission on Labour. The heading up is not done in the chamber, but underneath, where there is a free circulation of air.

Reduction in the Hours of Labour.—The short time spent in actual labour in some departments as compared with the time the men are required to be in attendance at the works, may have suggested to those unacquainted with the processes in operation, that a commutation of the hours of attendance to the hours of labour actually required to perform the work would—provided the work were done—meet all the requirements of the case.

This, however, is not so, and as an example take the burnermen (vitriol department) whose hours of attendance are 84 per week, but whose actual work, as has been shown, extends to only 28½ hours per week. Each of the burnermen employed in this department has to charge a certain number of pyrites burners during the 12 hours' shift, and it is indispensable that the charging should be spread uniformly over the 12 hours, otherwise the success of the process would be impossible.

Take another case of an entirely different character, untrammelled by any regulations as to times of charging, and in which it is greatly to the employers' advantage that the work should be done as expeditiously as possible, viz., the copper workers, whose hours of actual labour during the 12 hours' shift are on an average 4 hours 55 minutes, or say 30 hours per week. It must not, however, be understood that the hours of actual labour given in this case are defined by operations requiring only that length of time; were they extended the charge of ore would be calcined in less time with a corresponding saving of fuel, less wear and tear to the plant per ton of ore calcined, and an increase of workmen's wages.

In this process, the furnace having been charged with ore, and the ore levelled, no further work on the part of the workmen is required until the charge has reached a sufficiently high temperature. The process really consists in exposing fresh surfaces of the ore mixture at a sufficiently high temperature to the action of atmospheric air, and the oftener fresh surfaces

are exposed the sooner will the operation be finished. The men, however, trust in a very great degree to heat and the action of air as supplementary to their work.

Sick and Accident Club, in connexion with the Globe Works.

All the persons employed (average 273) are members of the club, and besides receiving sick pay have also medical attendance.

The following are the ailments to which the men have been subject during the six months ending 31st March 1892, and embracing the most crucial period of the year. Comparisons ought therefore to be confined to this period.

It is to be regretted that data are not to hand by which a comparison could be made with this and other districts as to the proportion of the various forms of disease.

Total Number of Men affected.	Ailments, and Number of Men affected. Six Months ending 31st March 1892.												
	Influenza.	Bronchitis.	Congestion of Lungs.	Diarrhœa.	Epithalial Cancer.	Febricula.	Gastric Catarrh.	Gastritis.	Inflamed Legs.	Lumbago.	Neuralgia.	Rheumatism.	Tonsillitis.
41	15	6	1	4	1	6	1	1	2	1	1	1	1

Mortality and Nature of Disease for Four Years ending 31st March 1892.

Fourteen men died during this period. Of this number one man was killed by a crane accident, and in the case of three others no record exists as to the cause of death.

Total Number of Deaths.	Death Rate per 1,000 per Annum.	Diseases, and Number of Deaths from each. Four Years ending March 1892.									
		Bronchitis.	Bright's Disease.	Cardiac Disease.	Apoplexy.	Consumption.	Cancer of the Stomach.	Pneumonia.	Typhoid Fever.	Killed by Crane.	Disease not known.
41	12·82	2	2	1	1	1	1	1	1	1	3
Rate per 1,000 per annum	-	1·832	1·832	·916	·916	·916	·916	·916	·916	—	—

Hardshaw Street, St. Helens,
Lancashire, 17th May 1892.

We certify that the foregoing list of deaths, occurring in connexion with the Globe Alkali Works during the last four years is correct.

(Signed) H. and F. Knowles,
Surgeons.

In the return of "Diseases not known, 3," there were two deaths from "unknown causes," as certified by coroner, and one death of which there is no record of cause of.

The death rate—12·82 per 1,000 per annum—compares very favourably with that of the members of the Manchester Unity of Oddfellows, which for the five years ending 1891 is given as 13·9. The Order of Oddfellows may reasonably be said to include all the trades and

occupations of British workmen, and it may therefore be concluded that the conditions of health which affect the chemical operative are not more unfavourable than those which obtain generally throughout the different trades of the country.

J. R. Wylde,
District Manager.

St. Helens,
26th May 1892.

Hours of Attendance and Time spent in Actual Work at Globe Works.

Vitriol Process.

Average hours of attendance of the two shifts of men		84 per week.
Hours spent in actual labour	(say)	30 ,,

The latter is arrived at in the following way, viz.:—

Dropping one burner or kiln	2 minutes.
Barring and charging one burner	4 ,,
	6 ,,

30 burners are charged per 12 hours, or at the rate of 2½ per hour.

6 × 2½ =	15 minutes per hour.	
Time spent in potting	6 ,, ,,	
	21 ,,	× 12

= 4·2 hours per shift, or 29·4 per week.

Salt Cake Department.

Average hours of attendance	70 per week
Potmen.—Time spent in actual labour	52½ ,,

Arrived at as follows:—

Gathering-up charge	6¾ minutes.
Shoving	23½ ,,
Spreading	10 ,,
Charging pot	7½ ,,
Wheeling out salt cake	19 ,,
Wheeling salt	19½ ,,
Working pot	14 ,,
Watching acid-heater filling	16 ,,
Clinkering fire	3½ ,,
Firing	8 ,,
Throwing up cinders	2½ ,,
	129½ ,,

Or 2 hours 9½ minutes per charge × 3 = 8 hours 38 minutes per shift, or 51 hours 48 minutes per week.

Furnacemen.—Time spent in actual labour - 55 hours 18 minutes.

Arrived at as follows:

Taking in one charge	23½ minutes.
Spreading	10 ,,
Charging pot	7½ ,,
Clinkering	3 ,,
Slicing	28¾ ,,
Wheeling out salt cake	19 ,,
Slicing, toothraking, and drawing	36½ ,,
Firing	8 ,,
Throwing up cinders	2½ ,,
	138½ ,,

= 2 hours 18½ minutes per charge × 4 = 9 hours 13 minutes per shift, or 55 hours 18 minutes per week.

Bleaching Powder Department.

Lime dressers.—Three men employed.
Average hours of attendance - - - 63 per week.
Time spent in actual labour - - - (say) 30 „

Arrived at as follows:

2 men sieving - - - $3\frac{1}{2}$ hours each.
1 man laying down lime - - - $2\frac{1}{2}$ hours } = $3\frac{1}{2}$ „
1 man slacking lime - - - 1 „ }
All the men turning lime 1 hour each, ∴ each man works $4\frac{1}{2}$ hours, which × 6 = 27 hours per week—say 30 hours.

Hours of Attendance and Time spent in Actual Labour at Greenbank Works.

Vitriol Process.

Average hours of attendance of the two shifts of men - 84 per week.
Average hours spent in actual labour - - - 50 „

The latter is arrived at in the following way:

Dropping one burner or kiln - - - - -	2 minutes.
Barring and charging one burner - - - -	$6\frac{1}{2}$ „
∴ Dropping, barring, and charging one burner - -	$8\frac{1}{2}$ „

17 burners are charged per 12 hours, or at the rate of $1\frac{5}{12}$ per hour.

$1\frac{5}{12} \times 8\frac{1}{2} =$ - - - -	12 minutes per hour.
Time spent in potting nitre - - -	4 „ „
Time spent in blowing liquor and firing boiler -	$19\frac{3}{4}$ „ „
	$35\frac{3}{4} \times 12$

= 7 hours 9 minutes per shift, or 50 hours 3 minutes per week.

Salt Cake Department.

Potmen.—Hours of attendance - - - - $66\frac{1}{2}$ per week.
Time spent in actual labour - - - - 47 „

Arrived at as follows:

Gathering-up charge - - - - -	8 minutes.
Shoving charge - - - - - -	20 „
Spreading - - - - - - -	11 „
Charging pot - - - - - -	15 „
Filling up salt cake into waggon - - - -	13 „
Filling salt into trucks - - - - -	16 „
Working pot - - - - - -	17 „
Watching acid-heater filling - - - -	10 „
Clinkering fire - - - - - -	7 „
Firing - - - - - - -	8 „
Throwing out cinders - - - - -	3 „
	128

Or 2 hours 8 minutes per charge × 4 = 8 hours 32 minutes per shift = 46 hours 56 minutes per week.

Furnacemen.—Hours of attendance - - - $66\frac{1}{2}$ per week.
Hours of actual labour - - - - 47 „

Arrived at as follows:

Taking in one charge - - - - - -	20 minutes.
Spreading - - - - - -	12 ,,
Slicing - - - - - - -	28 ,,
Filling up salt cake in trucks - - -	13 ,,
Splicing, toothraking, and drawing - - -	37 ,,
Clinkering - - - - - - -	7 ,,
Firing - - - - - - -	8 ,,
Throwing out cinders - - - - -	3 ,,
	128

Or 2 hours 8 minutes per charge × 4 = 8 hours 32 minutes per shift = 46 hours 56 minutes per week.

Lime dressers.—Two men employed.

Hours of attendance - - - - - -	47 per week.
Hours of actual labour - - - - -	33½ ,,

Arrived at as follows:

2 men sieving - - - - - -		2¾ hours each.
2 men laying down lime - - -	1¼ hours	1¾ ,,
and slacking - - -	½ ,,	
2 men turning lime - - - - -		1 ,,
		5½ hours each.

∴ each man 5½ hours per shift × 6 shifts = 33 hours per week.

SUTTON LODGE WORKS.

HOURS of ATTENDANCE and ACTUAL LABOUR of PACKERS and LIMEMEN.

Week Ending.	M. Grady.		J. Conway.		J. McCabe.	
	Total Attendance Hours.	Actual Labour Hours.	Total Attendance Hours.	Actual Labour Hours.	Total Attendance Hours.	Actual Labour Hours.
April 27 - - - - - -	24½	16	24	16	26	17
May 4 - - - -	29¾	15½	29½	15½	30½	15¼
,, 11 - - - -	8½	6	10	6	10¼	6
Total for three weeks -	62¾	37½	63½	37½	66¾	38¼
Average per week - -	20¾	12½	21	12½	22¼	12¾

Average of last 3 weeks total attendance - - 21½ hours per man.
,, ,, actual labour - - 12½ ,,

Week Ending.	Stillmen.		Blowers.		Limepot.	
	Total Hours Attendance.		Total Hours Attendance.		Total Hours Attendance.	
	Day Shift.	Night Shift.	Day Shift.	Night Shift.	Day Shift.	Night Shift.
April 27 - - - -	55½	81	55½	81	55½	81
May 4 - - - -	55½	79	55½	81	55½	79
,, 11 - - - -	55½	81	55½	81	55½	81
Total for three weeks -	166½	241	166½	243	166½	241
Average for three weeks -	55½	80⅓	55½	81	55½	80⅓

ACTUAL LABOUR required at the VITRIOL BURNERS.

Work done by R. Rowland on May 11th, 1892.

Dropping kiln - - - - -	$1\frac{1}{4}$	minutes.
Bringing tools from one kiln to another -	1	,,
Barring - - - - - -	1	,,
Raking - - - - - -	$0\frac{1}{2}$	,,
Charging - - - - - -	$1\frac{3}{4}$	,,
	$5\frac{1}{2}$	,,
Kilns done per hour - -	2	
	11	,,
Nitreing.—Drawing two and charging three pots and making up doors - - - -	5	,,
Actual labour per hour - -	16	,,

Actual labour per week of 84 hours at 16 minutes per hour = $22\frac{1}{2}$ hours.

The above particulars were taken by Mr. Burdekin. The work was done in anything but a hurried manner.

ACTUAL LABOUR required in the PRODUCTION of SALT CAKE.

Pot Man.

Actual Work.			Actual Rest.		
Period.	Time.	How spent.	Period.	Time.	How spent.
9.55 a.m. to 10.10 a.m.	15 min.	Pitching charge.			
10.10 ,, 10.20 ,,	10 ,,	Spreading charge.			
10.20 ,, 10.40 ,,	20 ,,	Charging pot.			
10.40 ,, 10.50 ,,	10 ,,	Firing furnace.			
10.50 ,, 11.10 ,,	20 ,,	Watching liquor (supervision).			
11.10 ,, 11.15 ,,	5 ,,	Sweeping round furnace.			
11.15 ,, 11.45 ,,	30 ,,	Filling charge from boxes to be wheeled away.			
			11.45 a.m. to 12.0 noon.	15 min.	Sitting down.
12.0 noon to 12.5 p.m. -	5 ,,	Firing furnace.			
12.5 p.m. 12.15 ,, -	10 ,,	Wheeling salt.			
			12.15 p.m. to 12.50 p.m.	35 ,,	Having dinner.
12.50 ,, 1.0 ,, -	10 ,,	Wheeling salt.			
Total—3 hrs. 5 min.	135 min.			50 min.	

Roaster Man.

Actual Work.			Actual Rest.		
Period.	Time.	How Spent.	Period.	Time.	How Spent.
9.55 a.m. to 10.20 a.m.	25 min.	Carrying and spreading charge.			
10.20 „ 10.40 „	20 „	Charging pot.			
10.40 „ 11.0 „			10.40 a.m. to 11.0 a.m.	20 min.	Sitting smoking.
11.0 „ 11.15 „	15 „	Slicing charge.			
11.15 „ 11.48 „	33 „	Wheeling charge from boxes.	11.48 a.m. to 11.55 p.m.	7 „	Sitting down.
11.55 „ 12.10 „	15 „	Slicing charge.	12.10 p.m. to 12.30 p.m.	20 „	Having dinner.
12.30 p.m. to 12.50 p.m.	20 „	Slicing charge and drawing same into boxes.	12.50 p.m. to 1.0 p.m.	10 „	Sitting down.
	128 min.			57 min.	

During a period of 3 hours 5 min. the average time per man spent in actual labour - - - = 2 hrs. 11⅓ min.

Duringa period of 3 hours 5 min. the average time per man spent in rest - - - - = 53½ „

Actual time employed in works per week = 69 hrs.

„ engaged in work „ = 49 „ 2¾ min.

„ „ resting „ = 19 „ 57¼ „

REPORT on the SICKNESS and MORTALITY experienced by the WORKMEN employed at TENNANT'S WORKS, HEBBURN.

The figures given below are based on the official records of the benefit society which formerly existed at the above works. All the members of the society were employed at these works, though not all workmen were members, but principally those who were not in any ordinary friendly society. A number of members, were not elegible for membership in outside societies by reason of age. The ages varied from 18 to 70 years, and no medical examination was required on joining, the only condition of membership being employment at the above works, and no man was excluded on account of age or any other cause. Most of the members had been employed in chemical works during the whole of their working lives: many of them for 20 years, and from that up to 50 years. The members of the society numbered about two-thirds of all our workmen.

The accounts were—by request of the men—kept in four departments; and the average number of members, number of days sickness, and number of deaths during the seven years existence of the society are shown below. The society was wound up at the end of 1890.

Sickness and Mortality experienced by the Members of the Sick and Funeral Benefit Society at Tennant's Alkali Works, Hebburn, for Seven Years, 1884—1890.

—	Total.			Vitriol and Sulphate Department.			Ash and Soda Department.			Bleaching Powder Department.			Mechanical Department (including Coopers).		
	No. of Members.	Days' Sickness.	Deaths.	No. of Members.	Days' Sickness.	Deaths.	No. of Members.	Days' Sickness.	Deaths.	No. of Members.	Days' Sickness.	Deaths.	No. of Members.	Days' Sickness.	Deaths.
1884 - -	485	2,407	1	61	258	—	173	767	1	66	159	—	185	1,223	—
1885 - -	422	3,506	1	48	191	—	154	2	—	57	342	—	163	1,601	1
1886 - -	417	4,306	4	52	632	1	161	2	2	50	200	—	154	1,992	1
1887 - -	416	4,931	10	57	338	2	153	1,874	1	52	750	—	154	1,969	7
1888 - -	435	5,720	12	55	363	1	174	2,063	1	54	565	4	152	2,729	6
1889 - -	256	3,368	1	48	399	—	162	2,455	—	46	514	1	Benefit suspended this year, and statistics incomplete.		
1890 - -	372	4,835	3	45	623	—	135	1,	2	47	479	—	145	1,780	1
Total for seven years.	2,803	29,073	32	366	2,804	4	1,112	11,966	7	372	3,009	5	953	11,294	16
Average sickness days per annum per member.	10·37			7·66			10·76			8·09			11·85		
Average deaths per annum per thousand.	11·42			10·93			6·29			13·44			16·		
				Vitriol, Salt Cake, and Bleaching Powder Departments.											
Average sickness days per annum per member.	—			7·88			—			—			—		
Average deaths per annum per thousand.	—			12·19			—			—			—		

Note.—No deduction whatever has been made for sickness due to accidents, nor for old men who might be regarded as "permanently sick."

Auditors' Certificate.

We hereby certify that we have examined the books of the Sick and Funeral Benefit Society at Tennant's Works, Hebburn, and that the above is a correct statement of sickness and mortality as shown by the books.

(Signed) Monkhouse, Goddard, & Co.,
Chartered Accountants.

Newcastle-on-Tyne, April 27th, 1892.

It was desired to obtain, for comparison, similar figures for the same period from the local friendly societies, but efforts to this end were unsuccessful. Application was then made to the general secretaries of

the two largest orders in England, viz., the Manchester Union of Oddfellows and the Ancient Order of Foresters; but in all cases the societies are unable or unwilling to give the desired information. We were therefore compelled to fall back on the information contained in a publication called the "Foresters' Directory, 1891," from which the following table has been prepared :—

Ancient Order of Foresters—Sickness and Mortality.

As reported in the "Foresters' Directory, 1891."

—	Sickness: Days per Member.					Mortality per Thousand 1890.
	1879.	1880.	1889.	1890.	Average for 4 Years.	
England - - -	9·57	9·45	10·99	12·11	10·28	11·91
Durham - - -	12·65	12·92	15·88	16·32	14·44	15·22
Northumberland - -	11·36	10·97	13 40	14·00	12·43	12·41

Note.—(1) The number of Foresters in 1890 were as follow :—England 562,813, Durham 17,480, Northumberland 13,209.

(2) The above four years are the only ones for which figures are given in the above Directory.

It will be observed that the rate of mortality is given for only one year, but that the figure for the whole of England for that year (11·91 per 1,000) is somewhat low is proved by the statements made in Finlaison's "Report on Sickness and Mortality," where the mortality is given as 12·60 per 1,000, this being the average for five years, 1846-50, of 792,980 members of friendly societies. Further proof is contained in the report of the Manchester Unity of Oddfellows for 1891, where it is stated that the mortality of that society for five years, 1887-1891, was 13·90 per 1,000. The mean of these three numbers (11·91, 12·60, and 13·90) is 13·80 per 1,000.

The average amount of sickness per annum to each person is given by Finlaison at 10·11 days, which corroborates the figures for the Foresters given above.

Conclusions.

From the foregoing figures, the following conclusions may be drawn :—

First.—The average number of days sickness per annum per number at the above works was 10·37 days, which is practically the average sickness amongst the working classes of this country, as shown by the returns of friendly societies; whilst the number of days' sickness amongst the men employed in the vitriol, salt cake and bleaching powder departments was 23 per cent. less than this, or only 7·88 days per annum per member.

Secondly.—The annual rate of mortality for the whole society averaged 11·42 per 1,000, and amongst the men in the vitriol, salt cake and bleaching powder departments 12·19 per 1,000, whilst the average rate of mortality experienced by friendly societies is about 12·80 per 1,000.

Finally.—Judging from the figures given, it would appear that in these works—and by analogy in all works where the same operations are carried on: (1) The rate of mortality throughout the works, and in the three departments where gaseous escapes are liable to take place, is slightly less than the average experience of friendly societies; and (2) the number of days sickness per annum per member in the whole works is about the same as the average of friendly societies, whilst the sickness in the three departments where gaseous escapes are liable to take

place is actually about 23 per cent. less than the average of friendly societies.

Thos. W. Stuart,
District Manager.

Hebburn, 27th April 1892.

Table I.—Tyne and Scotland District.

Number of Special Process Men and the per-centage of total Men employed.

Name of Works.	Vitriol Burner Men.	Salt Cake, Pot, and Roaster Men.	Alkali. Revolver Men.	Alkali. Vat Men.	Alkali. Salters.	Alkali. Carbonators.	Alkali. Caustic Pots.
Tyne—							
Allhusen's	54	51	15	27	— {	Firig Finishing	10 9
Hebburn	12	18	16	12	19	14	—
Friar's Goose	12	36	14	6	24	6	—
St. Bede	11	24	8	6	8	10	—
Scotland—							
St. Rollox	12	22	18	12	12	6	—
Eglinton	4	8	—	—	—	—	—
Irvine	4	8	4	6	—	—	6
Totals	109	167	75	69	63	36	25

Name of Works.	Bleach. Weldon Packers.	Bleach. Deacon Packers.	Bleach. Lime Dressers.	Bleach. Still Men.	Sulphur. Carbonator Men.	Sulphur. Claus Kilns.	Copper Furnace Men.	Total Men employed.	Per-centage of Special Process Men to total Hands.
Tyne—									
Allhusen's	24	—	8	6	12	3	—	1,295	16·91
Hebburn	12	—	4	4	—	—	—	570	19·48
Friar's Goose	12	—	5	2	4	2	—	600	20·50
St. Bede	8	—	3	3	—	—	—	446	18·16
Scotland—									
St. Rollox	11	—	3	4	—	—	—	520	19·25
Eglinton	2	—	1	2	—	—	—	89	19·10
Irvine	2	—	1	2	—	—	—	105	31·40
Totals	71	—	25	23	16	·5	—	3,625	18·87

TABLE II.—TYNE and SCOTLAND DISTRICT.

Average Hours of Labour and Wages per Week.

Name of Works.	Vitriol Burner Men.		Salt Cake, Pot, and Roaster Men.		ALKALI. Revolver Men.		ALKALI. Vat Men.		ALKALI. Salting.		ALKALI. Carbonating.		ALKALI. Caustic Pots.	
	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.
TYNE:		s. d.		s. d.		s. d.		s. d.		s. d.		s. d.		s. d.
Allhusen's	56	32 1	56	30 0	56	40 4	84	35 4	—	—	{ Firing Finishing		56 84	35 0 63 8
Hebburn	56	33 10	70	34 6	71	36 0	54	32 0	70	32 6	70	30 6	—	—
Friar's Goose	56	31 6	71	33 0	70	37 0	58	44 0	70	28 0	70	31 0	—	—
St. Bede	56	31 6	70	32 6	72	41 7	72	27 0	72	24 0	72	31 0	—	—
SCOTLAND:														
St. Rollox	56	35 0	70	28 0	70	32 0	56	26 0	70	27 0	70	25 6	—	—
Eglinton	84	34 0	72	38 0	—	—	—	—	—	—	—	—	—	—
Irvine	84	33 3	70	35 8	70	40 0	54	37 0	—	—	—	—	72	52 0
Averages	64	33 0	68	33 1	69	37 9	63	33 7	70	28 0	70	29 6	71	50 3

Name of Works.	BLEACH. Weldon Packers.		BLEACH. Deacon Packers.		BLEACH. Lime Dressers.		BLEACH. Still Men.		SULPHUR. Carbonator Men.		SULPHUR. Claus Kilns.		Copper Furnace Men.	
	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.
TYNE:		s. d.				s. d.		s. d.		s. d.		s. d.		
Allhusen's	42	60 0	—	—	42	59 9	56	35 0	56	32 0	56	31 6	—	—
Hebburn	36	60 0	—	—	36	60 0	70	39 0	—	—	—	—	—	—
Friar's Goose	36	55 0	—	—	48	40 0	69	33 0	75	31 0	73	26 0	—	—
St. Bede	36	60 0	—	—	36	60 0	70	33 0	—	—	—	—	—	—
SCOTLAND:														
St. Rollox	48	34 0	—	—	54	33 0	75	27 0	—	—	—	—	—	—
Eglinton	36	55 0	—	—	48	52 0	72	46 0	—	—	—	—	—	—
Irvine	36	47 0	—	—	36	47 0	70	47 0	—	—	—	—	—	—
Averages	39	53 0	—	—	43	50 3	69	37 0	65	31 6	64	28 9	—	—

N.B.—The hours mentioned are the total hours the men are on duty, without deduction for meal times, &c.

TABLE III.—TYNE AND SCOTLAND DISTRICT.

Average Death-rate per 1,000 per annum.

	Total.	
TYNE:		
Allhusen's	—	No statistics.
Hebburn	11·42	7 years, 1884–90. See separate report on Sickness and Mortality.
Friar's Goose	10·37	10 years, 1881–1890.
St. Bede	9·93	8 years, 1884–1891.
SCOTLAND:		
St. Rollox	—	
Eglinton - about	5·00	Last 10 years.
Irvine	—	No statistics.
Average	9·18	

TABLE V.—TYNE AND SCOTLAND DISTRICT.

LIST of DEATHS at ST. ROLLOX CHEMICAL WORKS, GLASGOW.

May 1884—May 1892.

PROCESS DEPARTMENTS.

		Age.			Age.
1884, May 14	Sam. McGuillan	75	1886, Dec. 1	Rich. Cooke	70
„ 19	Robt. Marshall	55	„ 6	George Booth	65
Sept. 24	Murdo. McKenzie	60	1887, Jan. 10	Arch. McDonald	75
Oct. 22	Rob. Clayton	50	Feb. 5	George Irvine	40
Nov. 5	George Taylor	66	„ 16	Alex. Fitzpatrick	50
Dec. 3	William Eadie	70	„ 25	Pat. O'Brien	70
1885, Jan. 6	Robert Ward	55	Mar. 18	John Hutcheson	70
„ 20	Thomas Stay	50	Apr. 7	Norman McQueen	55
	James Connolly	50	June 2	Pat. O'Brien	32
Mar. 17	John Webster	74	Aug. 6	Arch. Campbell	76
„ 23	John McKenna	50	Dec. 28	Thos. Nelson	45
Apr. 20	Thomas Docherty	50	1888, Jan. 5	Robert Bell	55
Oct. 21	Neil McKinnow	80	„ 12	Hugh Stirling	45
Nov. 30	Sam. Russell	65	„ 16	Dan. Devme	70
Dec. 31	John McGuere	75	Feb. 23	Peter McLeod	—
1886, Apr. 29	Peter Collins	65	Mar. 20	John Coyle	50
May 10	John Glancy	70	„ 22	Harry Purvis	74
June 15	Pat McCafferty	50	Apr. 5	William McAdam	65
„ 30	Wm. Clark	48	June 25	John Millmore	55
Sept. 4	Hugh McKay	55	Aug. 27	John Docherty	75
„ 20	Thos. Carter	45	Sept. 4	Robert Wallace	—
„ 30	Mungo McLean	20	„ 22	Neil Douglas	60

Table V.—*continued.*

PROCESS DEPARTMENTS—*cont.*

		Age.			Age.
1888, Oct. 8 -	Wm. Malcolm - -	64	1890, Nov. 5 -	Dan. Livingstone -	78
„ 13 -	Chas. Wm. Fadgen -	35	„ 28 -	James Cormack -	50
Dec. 14 -	John Nicholson - -	55	1891, Jan. 13 -	Tom McQuirter - -	72
„ 24 -	Jos. Wilson - -	65	„ 22 -	Thomas Kennedy -	50
1889, Jan. 18 -	Mch. McGovern -	50	Feb. 28 -	Thomas Woods - -	36
„ 21 -	Dan. McLean - -	75	Mar. 10 -	James Sullivan -	56
Mar. 21 -	Thomas Haggerty -	70	„ 11 -	John Dean - -	28
July 22 -	Jas. McKenna - -	72	„ 20 -	William Nisbet -	74
Dec. 7 -	Francis Sherlock -	35	June 24 -	Thomas Somerville -	60
1890, Jan. 23 -	Jas. McNab - -	48	Oct. 20 -	Dan. McNeil - -	60
May 19 -	Jas. Hannoway -	56	Dec. 1 -	Pat McMahon -	70
July 11 -	Alex. Lees - -	40	„ 14 -	Sam Cochran - -	55
Sept. 16 -	Jos. Wyllie - -	60	Average age 58.		
„ 23 -	Thos. Mitchell - -	45			

TRADE DEPARTMENTS.

		Age.			Age.
1884, Sept. 30 -	James Davie - -	40	1888, July 6 -	Arch. McKenzie -	25
Nov. 10 -	Robt. Rodman - -	52	„ 2 -	Wm. Burnett - -	36
1885, Jan. 8 -	Rich. Rogers - -	28	Aug. 11 -	Peter Wright - -	60
Feb. 6 -	Ed. Quin - - -	40	Oct. 15 -	Alex. Cleland - -	75
Apr. 23 -	Jas. McKay - -	32	July 22 -	Ed. Mullen - -	56
July 20 -	Hugh McLuskie -	60	Aug. 6 -	John Donnelly -	65
Oct. 30 -	Thos. Billsborough -	65	Dec. 14 -	Jas. McDade - -	70
1886, Feb. 22 -	John Easton - -	70	1890, Jan. 31 -	John Twigg - -	65
„ 27 -	Jos. McLuskie -	47	Apr. 23 -	James Gray - -	68
May 24 -	Alex. McInnes - -	70	July 15 -	John McAnespie -	32
July 16 -	Robt. Tiernon -	30	1891, Jan. 14 -	Wm. Caldwell - -	65
Sept. 28 -	Thos. Anderson - -	70	„ 22 -	Thos. Kennedy -	50
Oct. 2 -	John Mooney - -	70	Mar. 21 -	James Boyle - -	66
Dec. 18 -	Wm. Docherty - -	70	Apr. 24 -	Adam Rutherford -	65
1887, Jan. 11 -	Thos. Kelly - -	70	July 23 -	James Dilke - -	30
Mar. 5 -	Pat Struther - -	52	Aug. 5 -	Don. McKenzie -	70
Aug. 30 -	Thos. McVey - -	60	„ 5 -	John McGeachie -	55
Nov. 5 -	Pat Murray - -	62	Jan. 27 -	Rod. McLean - -	80
1888, Jan. 9 -	Thos. Kelly - -	50	Average age 56.		
„ 25 -	John Lafferty - -	65			

Table VI.—Tyne and Scotland District.

Actual hours of labour of men who work night and day shifts. (The hours of labour are the total hours on duty without deductions for meal times, &c.)

Allhusen's Works.

—	Vitriol Burner Men, Salt Cake Men, Revolver Men, Caustic Firemen.	Caustic Finishers.		Lime Dressers.	Bleach Packers.
		Day.	Night.		
Sunday - -	All 8-hour shifts.	12	12	7 hours per day.	7 hours per day.
Monday - -		8	13		
Tuesday - -		8	13		
Wednesday - -		8	13		
Thursday - -		8	13		
Friday - - -		8	13		
Saturday - -		7	18		
Total per week -	56	59	95	—	—

Friars Goose Works.

—	Vitriol Burner Men.	Salt Cake Men and Revolver Men.		Salters and Carbonators.		Bleach Packers.	Lime Dressers.		Still Men.	
		Day.	Night.	Day.	Night.		Day.	Night.	Day.	Night.
Sunday - -	8-hour shifts.	—	12	—	10	6 hours per day.	—	—	—	1
Monday - -		11	13	11	13		8	9	11	13
Tuesday - -		11	13	11	13		8	9	11	13
Wednesday -		11	13	11	13		8	9	11	13
Thursday - -		11	13	11	13		8	9	11	13
Friday - -		11	13	11	13		8	9	11	13
Saturday - -		9	—	10	—		6	5	8	—
Total per week	56	64	77	65	75	—	46	50	63	75

Hebburn Works.

—	Vitriol Burner Men.	Salt Cake Men.		Revolver Men, Salters, and Carbonators.		Bleach Packers and Lime Dressers.	Still Men.	
		Day.	Night.	Day.	Night.		Day.	Night.
Sunday		—	13	—	13		—	13
Monday		11	13	11	13		11	13
Tuesday		11	13	11	13		11	13
Wednesday	8-hour shifts.	11	13	11	13	6 hours per day.	11	13
Thursday		11	13	11	13		11	13
Friday		11	13	11	13		11	13
Saturday		7	—	9	—		7	—
Total per week	56	62	78	64	78	36	62	78

St. Bede Works.

—	Vitriol Burner Men.	Salt Cake Men.		Revolver Men, Salters, and Carbonators.		Bleach Packers and Lime Dressers.	Still Men.	
		Day.	Night.	Day.	Night.		Day.	Night.
Sunday		—	13	—	13		—	13
Monday		11	13	11	13		11	13
Tuesday		11	13	11	13		11	13
Wednesday	8-hour shifts.	11	13	11	13	6 hours per day.	11	13
Thursday		11	13	11	13		11	13
Friday		11	13	11	13		11	13
Saturday		7	—	10	—		8	—
Total per week	56	62	78	65	78	36	63	78

St. Rollox Works.

—	Vitriol Burner Men.		Salt Cake Men, Revolver Men, Salters, and Carbonators.		Bleach Packers.		Lime Dressers.		Still Men.	
	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.
Sunday			—	13	—	—	—	—	—	7
Monday			11	13	8	—	9	—	11	13
Tuesday			11	13	8	—	9	—	11	13
Wednesday	8-hour shift.		11	13	8	—	9	—	11	13
Thursday			11	13	8	—	9	—	11	13
Friday			11	13	8	—	9	—	11	13
Saturday			7	—	8	—	9	—	24	—
Total per week	56		62	78	48	—	54	—	79	72

Eglinton Works.

—	Vitriol Burner Men.		Salt Cake Men.		Bleach Packers.		Lime Dressers.		Still Men.	
	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.	Night.	Day.
Sunday	12	12	—	13	—	—	—	—	—	12
Monday	12	12	11	13	6	—	8	—	12	12
Tuesday	12	12	11	13	6	—	8	—	12	12
Wednesday	12	12	11	13	6	—	8	—	12	12
Thursday	12	12	11	13	6	—	8	—	12	12
Friday	12	12	11	13	6	—	8	—	12	12
Saturday	12	12	9	—	6	—	8	—	12	—
Total per week	84	84	64	78	36	—	48	—	72	72

Table VII.—Tyne and Scotland District.

Average Weekly Earnings per Individual.

—	No. of Hands Employed.	Average Total Weekly Wages, including Office and Staff.	Average Amount per Individual.
Tyne:		£	s. d.
Allhusen's	1,295	1,916	29 7
Hebburn	570	880	30
Friar's Goose	599	920	3 8
St. Bede	446	620	27
Scotland:			
St. Rollox	520	656	26
Eglinton	89	130	29
Irvine	105	166	
Totals and average	3,624	5,288	

N.B.—The above does not include salaried officials.

Table VIII.—Tyne and Scotland District.

List of Men in St. Rollox Chemical Works 60 Years of Age and upwards. 3rd March 1892.

—	Age.	Years in Works.
Alkali:		
John Cussack	64	35
Jas. McMullan	60	22
Pat M'Carron	61	32
James Duffy	61	30
Pat Docherty	66	32
James Brown	60	34
Chas. Collins	60	28
Pat Gallacher	62	42
John Dobbs	74	25
Thos. Thirlow	72	43
Peter Glen	60	48
John Malone	60	33
Matthew Connally	68	18
Vitriol:		
William Galbraith	75	52
Thomas Thompson	74	50
Jas. Wilson	70	40
Geo. Brunton	70	40
Manganese:		
Alex. Rennie	63	25
B. Powder:		
Peter McLever	78	48
M. Acid:		
Wm. Donald	64	41
Sulphate:		
Jas. Currie	62	41
David Mongomery	75	40
Thos. Stance	66	46
Jonh Dickson	61	37
Sam Vance	61	28
Allan McLeam	60	40
Joiners:		
William Brockley	61	30
Dan McCormack	33	39
David Johnstone	64	28
Engineers:		
John Ross	65	22
Andrew Alexandra	60	20
James Guthrie	65	18
Bricklayers:		
Arch. Campbell	64	50
Harry Wright	61	25
Slaters:		
Robt. Burnet	70	35
Carters:		
Pat Carlton	60	36
Railway:		
Anthony Griffin	60	25
Casks:		
Andrew Watson	67	44
Labourers:		
Wm. Burnett	70	30
Pat Tollins	60	18
Tom Beggs	61	36
Chas. Hill	65	30
Tom Murty	70	47
John Ferguson	62	36
Jas. Sturgeon	63	40
Arch. Colquhoun	69	60
Dan M'Auley	70	50
John Monaghan	68	41
Don. McDougall	66	33
Chas. McGaffigan	70	26
Average	$65\frac{1}{2}$	$35\frac{1}{3}$

ALKALI, &c. WORKS REGULATION ACT, 1881.

SPECIAL RULES made by the United Alkali Company, Limited, for the guidance of the workmen employed by them as "bleaching powder men."

Every bleaching powder man shall comply with the requirements of such of the following special rules as may apply to any process in which he is employed; that is to say:—

1. Manganese mud must not be run into a chlorine generating still at such a speed as will cause chlorine to escape out of any lute on a main or through any joint of a pipe.

2. A still must not be run or emptied until all the chlorine generated in the still has, so far as may be practicable, been worked off.

3. Every lute in connexion with any pipe which conveys chlorine from a still to a bleaching powder chamber must be examined at least twice in every twenty-four hours, that is to say, at least once between the hours of 6 and 8 a.m., and at least once between the hours of 5 and 7 p.m.

4. A bleaching powder chamber must not be opened until all free chlorine therein has, so far as may be practicable, been worked off.

5. When the supply of chlorine to a chamber exceeds what is requisite the main must be immediately disconnected or the making of chlorine in the stills must be slackened.

6. When chlorine begins to pass through the exhaust or draught pipe of any set of chambers, fresh lined chambers must be immediately connected or the draught must be slackened.

The workman in charge of the salt-cake pot, or of the still in connexion with the chambers must be forthwith instructed to diminish or stop the evolution of hydrochloric acid or chlorine as the case may require.

7. No sample must be taken from the "Deacon" chambers at any time when the salt-cake pot in connexion with the chambers is generating hydrochloric acid gas.

Every bleaching powder man who violates any of the foregoing rules will be liable to a fine of two shillings and sixpence for every such violation.

(L.S.)

Sanctioned by the Local Government Board,
25th November, 1892.

ALKALI, &c. WORKS REGULATION ACT, 1881.

SPECIAL RULES made by the United Alkali Company, Limited, for the guidance of the workmen employed by them as "burner men."

Every burner man shall comply with the requirements of such of the following special rules as may apply to any process in which he is employed; that is to say:—

1. To prevent the escape of gas in the process of charging a kiln the damper must, if necessary, be drawn.

2. During the process of breaking-up or levelling a kiln the doors must be kept as nearly closed as possible.

3. A kiln must not be screwed down sooner than 30 minutes before the time for charging, unless the foreman order otherwise.

4. During the process of drawing a kiln, two doors only must be down at any one time.

5. Not more than one kiln in a set must be charged, screwed down, or drawn at any one time, unless the foreman otherwise permits.

6. In the process of potting nitre the liquid must be run on slowly.

Every burner man who violates any of the foregoing rules will be liable to a fine of two shillings and six pence for every such violation.

(L.S.)

Sanctioned by the Local Government Board,
25th November 1892.

ALKALI, &c. WORKS REGULATION ACT, 1881.

SPECIAL RULES made by the United Alkali Company, Limited, for the guidance of the workmen employed by them as "salt cake men."

Every salt cake man shall comply with the requirements of such of the following special rules as may apply to any process in which he is employed; that is to say:—

1. A pot must not be charged when it is too hot.

2. Liquor must not be run into a pot until the whole charge of salt is in, and the door replaced.

3. If gas begins to escape in the process of running liquor into a pot the running liquor must be immediately slackened, or, if necessary, stopped completely for a time.

4. The damper between the pot and roaster must be kept as tight as possible.

5. In working the roaster all the doors must be kept closed as far as is practicable.

6. The opening from each roaster to a draft stack must be kept clear.

If gas begins to escape from the furnace the damper in the stack must be drawn.

7. All charges which have been properly roasted must be drawn from the furnace into the boxes once in every two hours, that is to say, at 7.30 a.m., 9.30 a.m., 11.30 a.m., 1.30 p.m., 3.30 p.m., 5.30 p.m., 7.30 p.m., 9.30 p.m., 11.30 p.m., 1.30 a.m., 3.30 a.m., 5.30 a.m.

If a charge is not properly roasted at the time fixed by this rule for drawing it from the furnace, the charge must be kept in the furnace until it has been thoroughly roasted or until the foreman permits it to be drawn.

8. If gas escapes from hot salt cake that is being loaded into a barrow, or tipped into a store, cold salt cake must be thrown upon it to stop the escape as far as possible.

Every salt cake man who violates any of the foregoing rules will be liable to a fine of two shillings and sixpence for every such violation.

(L.S.)

Sanctioned by the Local Government Board,
25th November 1892.

DEAR SIR, Northwich, 31st August 1893.

As promised this morning we give you below a few figures relating to our sick club payments, before and after the introduction of the three shifts in our works.

We have taken as comparison a summer quarter in 1889, before the introduction of three shifts, and a summer quarter in 1893, after the introduction.

In 1889 the per-centage of those who received sick pay equals - 7·1
In 1893 - - - - - - - - 5·1
Or a reduction of 28·3 per cent.

In 1889 the men who were attended by the doctor equal - 10·12
In 1893 - - - - - - - - 5·1
Or a reduction of nearly 50 per cent.

We wish you to notice particularly the great reduction in those who received doctor's attendance (which means stopping away one or two days without actually being laid up for a week) has diminished to one half of what it used to be.

In our club only men who are away a week receive sick pay.

I also send you a copy of Hasenclever's patent, which I promised you.

If in any way we can be of service to you in your investigations we shall be very glad to give you our assistance.

Yours truly,
For Brunner, Mond, & Co., Limited,
GUSTAV JARMAY,
Managing Director.

H. S. Richmond, Esq.,
34, Canning Street, Liverpool.

The following special rules have been prepared in accordance with the recommendations of the Committee:—

FACTORY AND WORKSHOP ACT, 1878 to 1891.

SPECIAL RULES.

CHEMICAL WORKS.

I. In future every uncovered pot, pan, or other structure containing liquid of a dangerous character, shall be so constructed as to be at least 3 feet in height above the ground or platform. Those already in existence which are less than 3 feet in height, or in cases where it is proved to the satisfaction of an inspector that a height of 3 feet is impracticable, shall be securely fenced.

II. There shall be a clear space round such pots, pans, or other structures, or where any junction exists a barrier shall be so placed as to prevent passage.

III. Caustic pots shall be of such construction that there shall be no footing on the top or sides of the brickwork, and dome-shaped lids shall be used where possible.

IV. No unfenced planks or gangways shall be placed across pots, pans, or other structures containing liquid of a dangerous character. This rule shall not apply to black ash vats where the vats themselves are otherwise securely fenced.

V. Suitable respirators shall be provided for the use of the workers in places where poisonous gases or injurious dust may be inhaled.

VI. The lighting of all dangerous places shall be made thoroughly efficient.

VII. Every place where caustic soda or caustic potash is manufactured shall be supplied with syringes or wash bottles, which shall be enclosed in covered boxes fixed in convenient places, in the proportion of one to every four caustic pots. They shall be of suitable form and size, and be kept full of clean water. Similar appliances shall be provided wherever, in the opinion of an inspector, they may be desirable.

VIII. Overalls, kept in a cleanly state, shall be provided for all workers in any room where chlorate of potash or other chlorate is ground. In every such room a bath shall be kept ready for immediate use.

In every chlorate mill, tallow or other solid lubricant shall be used instead of oil.

IX. Respirators charged with moist oxide of iron or other suitable substance, shall be kept in accessible places, ready for use in cases of emergency arising from sulphuretted hydrogen or other poisonous gases.

X. In salt cake departments suitable measures shall be adopted by maintaining a proper draught, and by other means to obviate the escape of low-level gases.

XI. Bleaching powder chambers, after the free gas has, as far as may be practicable, been drawn off or absorbed by fresh lime, shall, before being opened, be tested by the standard recognised under the Alkali Act. Such tests shall be duly entered in a register kept for the purpose, which shall be produced to an inspector whenever called for.

All chambers shall be ventilated, as far as possible, when packing is being carried on, by means of open doors on opposite sides and openings in the roof so as to allow of a free current of air.

XII. In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows :—" If any " person who is bound to observe any special rules established for any " factory or workshop under this Act, acts in contravention of, or fails " to comply with, any such special rule, he shall be liable on summary " conviction to a fine not exceeding two pounds."

R. E. Sprague Oram,
H.M. Chief Inspector of Factories.

Factory and Workshop Acts, 1878 to 1891.

SPECIAL RULES (CHEMICAL WORKS).

Bichromate Works.

I. In future every uncovered pot, pan, or other structure containing liquid of a dangerous character, shall be so constructed as to be at least 3 feet in height above the ground or platform. Those already in existence, which are less than 3 feet in height, or in cases where it is proved to the satisfaction of an inspector that a height of 3 feet is impracticable, shall be securely fenced.

II. There shall be a clear space round such pots, pans, or other structures, or where any junction exists a barrier shall be so placed as to prevent passage.

III. No unfenced planks or gangways shall be placed across pots, pans, or other structures containing liquid of a dangerous character.

IV. Respirators suitable for protection of nostrils and mouth shall be provided where injurious dust or noxious fumes may be inhaled.

V. The lighting of all dangerous places shall be made thoroughly efficient.

VI. Inasmuch as dust is the principal cause of the various evil results to workers in chromium compounds, all due means shall be taken to limit in every way the formation of dust.

VII. Gloves of some waterproof material shall be provided for the use of workers who handle the crystals.

VIII. Sufficient lavatory accommodation, with hot and cold water, soap, nail brushes, and towels, shall be provided.

IX. In cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshop Act, 1891, section 9, which runs as follows :—" If any " person who is bound to observe any special rules established for any " factory or workshop under this Act, acts in contravention of, or fails " to comply with, any such special rule, he shall be liable on summary " conviction to a fine not exceeding two pounds."

R. E. Sprague Oram,
H.M. Chief Inspector of Factories.

Mr. Richmond has made the following additional remarks :—

" *Chemical Works.*—The Committee in this case framed a code of rules dealing specially with the fencing of vats, pans, &c. to supply the

omission of all such provisions in the Act of 1891. Other rules also were proposed for the safety of the workpeople.

"The Committee had many complaints as to the escape of noxious fumes and gases in some departments, more especially in those where the manufacture of bleaching powder and salt cake is carried on. It was difficult to draw up any rules on this head without trespassing on the jurisdiction of the inspectors under the Alkali Act.

"With regard to the salt cake departments, the Committee simply made a general rule that "suitable measures should be adopted by *maintaining a proper draught*," &c., "to obviate the escape of low-level gases." In the course of my inquiries, and from conversations on the point with some managers, it appears to me that the prevention of the escape of low-level gases would best be prevented by the following recommendations :—

"(1.) That in factories where all salt cake furnaces work to a common exit, acid should not be run in to all the pots at the same time.

"(2.) Pipes from the decomposing pots should be of sufficient size to carry off the gas to the towers.

"(3.) Foremen should exercise due supervision to see that charges are not drawn too soon, and that too much acid is not run into the pots.

"(4.) That charges should first be drawn from the furnaces into boxes below.

"(5.) That cold salt cake should be thrown upon hot salt cake which is being loaded into a barrow or tipped into a store.

"(6.) That where possible, and to promote draught, dampers should be of such construction as never to be entirely closed.

"In connection with No. 2, I found that in some works only 10-inch pipes were in use, whilst few exceeded 15 inches. The Oldbury Alkali Co., however, provided 24-inch pipes, and considered that 21 inches should be a minimum. I may add that their salt cake shed, at my visit, was singularly free from low-level gases."

xix.—*Manufacture of Lucifer Matches where White or Yellow Phosphorus is used.*

The Chemical Committee were requested by you to extend their inquiries to the lucifer match manufacture, and Miss Abraham, who has visited all the lucifer match factories in the United Kingdom, with the exception of one in Scotland (visited by Miss Paterson) was added to the Committee. It is very gratifying to find that, having made inquiries at every lucifer match factory in the United Kingdom, no case of necrosis can be found since the Special Rules, which came into force in 1892, were enacted, except in one factory. Those rules were favourably referred to, but additional rules were recommended, which you have been pleased to include in the Amended Special Rules. It is to be hoped that this fearful complaint will in future be of very rare occurrence in this country. There were several cases of necrosis before the date of the Special Rules, which have been investigated by Her Majesty's Inspectors of Factories, and some of these are referred to in the reports of the Royal Commission on Labour, but these are not of recent occurrence.

The following is the report of the Committee :--

REPORT OF THE COMMITTEE OF INQUIRY.

To the Right Honourable HERBERT HENRY ASQUITH, Q.C., M.P., Her Majesty's Principal Secretary of State for the Home Department.

SIR, October 1893.

THE Committee have had before them the Reports from Her Majesty's Inspectors of Factories in the various districts in which lucifer match factories are situated. They have also had the advantage of reports by Miss Abraham on each of the lucifer match factories in England and Ireland, all of which have recently been visited by her, and by Miss Paterson on the one factory in Scotland.

In addition the Committee have personally visited some of the London factories.

Although they have been unable to trace any cases of necrosis since the special rules were established, beyond the two which have occurred in the factory of Messrs. Bryant and May, yet the Committee are of opinion that danger from that disease exists to all workers where white or yellow phosphorous is used. The Committee have carefully examined the special rules already in force, and are of opinion that with some alterations and additions great good may accrue to those employed under them.

These additions refer chiefly to better ventilation, and periodical medical examinations.

The Committee also consider that the practice of allowing persons to be employed in galleries above departments where fumes may rise is to be deprecated; and would suggest that some means be adopted whereby, in the boxing departments, matches becoming ignited may be rapidly extinguished.

It should be observed that there was some difference of opinion among the Committee as to whether it was advisable that a register should be kept with the names, addresses, &c. of persons employed in all dangerous departments. This register was desired by the majority, so as to obtain, if possible, outside information as to the prevalence of necrosis.

The Committee have therefore submitted alternative rules for No. 6.

We have the honour to be,
Sir,
Your obedient servants,
WM. DAWKINS CRAMP, Chairman.
ALFRED E. FLETCHER.
P. A. SIMPSON, M.D.
D. J. O'NEIL, M.B.
M. E. ABRAHAM.
H. S. RICHMOND, Secretary.

SPECIAL RULES.

LUCIFER MATCH FACTORIES.

Duties of Occupiers.

I. After the 31st day of December 1893 it shall not be lawful to carry on a lucifer match factory, where white or yellow phosphorous is

used unless such factory is certified by an inspector to be in conformity with the following special rules.

II. They shall provide for the processes of mixing, dipping, and drying an apartment or apartments separate from other portions of the factory.

III. They shall take effectual means to prevent the fumes from the before-mentioned processes and from the boxing department being allowed to enter the rest of the factory.

IV. They shall provide efficient means, both natural and mechanical, for thorough ventilation in the mixing, dipping, drying, and boxing departments.

V. They shall provide washing conveniences, fitted with a sufficient supply of hot and cold water, soap, nail brushes, and towels, and shall take measures to secure that every worker wash his her or hands and face before meals, and before leaving the works. Managers and overlookers shall report immediately to the occupier any instance which comes under their notice where this regulation has been neglected.

By W. Dawkins Cramp and H. S. Richmond.

VI. They shall arrange for an examination of the workers at the factory to be made at least once a month by a certifying surgeon, who shall have power to order temporary suspension or total change of work for any person showing symptoms of incipient necrosis. A register in a prescribed form shall be kept in which the certifying surgeon shall enter the dates and results of his visit.

Or,

By A. E. Fletcher, Miss Abraham, Professor Simpson, and Dr. O'Neil.

VI. They shall cause an examination of the workers at the factory to be made at least once a month by a certifying surgeon who shall have power to order temporary suspension or total change of work for any person showing symptoms of incipient necrosis. The certifying surgeon shall enter the date and result of each visit in the prescribed register, which shall contain the names and addresses of all workers in the mixing, dipping, drying, and boxing departments, with the date of their commencing and leaving employment in that factory.

VII. They shall provide in the boxing departments efficient means whereby matches becoming ignited can readily be extinguished. For this purpose vessels of water, one to every two workers, or pieces of wet flannel, one for each worker, are recommended.

VIII. Any person employed in the works complaining of toothache, or of swelling of the jaw, shall at once be examined by a medical man at the expense of the occupier; and if any symptoms of necrosis are present the case shall be immediately reported to one of Her Majesty's Inspectors of Factories for the district.

IX. No person having suffered from necrosis shall be permitted to resume work in a lucifer match factory until a certificate of fitness has been obtained from a qualified medical practitioner.

X. No person shall be permitted to work in the processes of mixing, dipping, drying, or boxing after the extraction of a tooth, without the certificate of a duly qualified medical practitioner that the jaw is healed.

As to Persons Employed.

XI. Every person employed in the mixing, dipping, drying, or boxing departments shall carefully wash his or her hands and face before meals and before leaving the works.

XII. In all cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshops Act, 1891, section 9, which runs as follows:—

"If any person who is bound to observe any special rules established for any factory or workshop under this Act acts in contravention of, or fails to comply with, any such special rule, he shall be liable on summary conviction to a fine not exceeding two pounds.

Factory and Workshop Acts, 1878 to 1891.

AMENDED SPECIAL RULES.

Lucifer Match Factories, where White or Yellow Phosphorous is used.

Duties of Occupiers.

I. After the 31st day of December 1893 it shall not be lawful to carry on a lucifer match factory, where white or yellow phosphorous is used, unless such factory is certified by an Inspector to be in conformity with the following special rules.

II. They shall provide for the processes of mixing, dipping, and drying, an apartment or apartments separate from other portions of the factory.

III. They shall take effectual means to prevent the fumes from the before-mentioned processes and from the boxing department being allowed to enter the rest of the factory.

IV. They shall provide efficient means, both natural and mechanical, for thorough ventilation in the mixing, dipping, drying, and boxing departments.

V. They shall provide washing conveniences, with a sufficient supply of hot and cold water, soap, nail brushes, and towels; and shall take measures to secure that every worker wash his or her hands and face before meals, and before leaving the works. Managers and overlookers shall report immediately to the occupier any instance which comes under their notice where this regulation has been neglected.

VI. They shall cause an examination of the workers at the factory to be made at least once a month by a certifying surgeon who shall have power to order temporary suspension or total change of work for any person showing symptoms of incipient necrosis. The certifying surgeon shall enter the date and result of each visit in the prescribed register, which shall contain the names and addresses of all workers in the mixing, dipping, drying, and boxing departments, with the date of their commencing and leaving employment in that factory.

VII. They shall provide in the boxing departments efficient means whereby matches becoming ignited can readily be extinguished. For this purpose vessels of water, one to every two workers, or pieces of wet flannel, one for each worker, are recommended.

VIII. Any person employed in the Works complaining of toothache or of swelling of the jaw, shall at once be examined by a medical man at the expense of the occupier, and if any symptoms of necrosis are present, the case shall be immediately reported to one of H.M. Inspectors of Factories for the district.

IX. No person having suffered from necrosis shall be permitted to resume work in a lucifer match factory until a certificate of fitness has been obtained from a qualified medical practitioner.

X. No person shall be permitted to work in the processes of mixing, dipping, drying or boxing after the extraction of a tooth, without the certificate of a duly qualified medical practitioner that the jaw is healed.

As to Persons Employed.

XI. Every person employed in the mixing, dipping, drying, or boxing departments shall carefully wash his or her hands and face before meals and before leaving the works.

XII. In all cases where the co-operation of the workers is required for carrying out the foregoing rules, and where such co-operation is not given, the workers shall be held liable in accordance with the Factory and Workshops Act, 1891, section 9, which runs as follows:—

"If any person who is bound to observe any special rules established for any factory or workshop under this Act acts in contravention of, or fails to comply with, any such special rule, he shall be liable on summary conviction to a fine not exceeding two pounds."

Certified

R. E. Sprague Oram, H.M. Chief Inspector of Factories.

H. H. Asquith, H.M. Secretary of State.

Mr. Richmond remarks :—

In revising the Special Rules for Lucifer Match Works already in force, the Committee were struck by the fact that they contained no recognition whatever, of danger from necrosis arising in the *boxing departments*. The Committee were of opinion that there is if anything more danger there than elsewhere. They therefore proposed new rules for boxing departments.

There was one point brought under their notice, which appeared to be of great importance, but for which they did uot see their way to make a practical rule. I allude to the thorough drying of the matches in the drying rooms before being brought into the boxing rooms. Matches thoroughly dried ignite, in the process of boxing, much more easily than those just falling short of a complete dryness; and there is n consequence a temptation to remove matches from the drying rooms too soon. But undoubted danger arises to the workpeople from the sweating of the matches themselves, when not thoroughly dried, and from the handling of them.

"Personally I should like to see a rule added to the effect that:—

"All matches shall be thoroughly dried before being removed from the drying to the boxing rooms."

This, even though it might be somewhat difficult to decide whether matches were sufficiently dried, would at any rate draw attention to a recognised danger. One firm attributed their complete immunity from any cases of necrosis to the fact that they dried their matches more thoroughly than was usually the case.

The following report on the regulations respecting the manufacture of Lucifer Matches in Germany and Prussia has been prepared at Her Majesty's Embassy at Berlin.

No. 311.

GERMANY.

Berlin.

Sir E. Malet to the Earl of Rosebery.

My Lord, Berlin, December 12, 1893.

I have the honour to enclose a memorandum which has been drawn np by Mr. Percy Wyndham, embodying the Laws and Regulations in

force in Germany and Prussia with regard to the manufacture of Lucifer Matches.

I have, &c.
(Signed) E. B. Malet.

Report on the Regulations regarding the Manufacture of Lucifer Matches in Germany and Prussia.

Abstract of Contents.

Commission of 1879.
Law of May 13, 1884.
Declaration of July 11, 1884.
" " 8, 1893.
Application of industrial code to erection of works.

Commission of 1879.

In 1879 the Reichstag resolved to petition the Imperial Chancellor to take steps to prohibit the use of white phosphorus in the manufacture of matches and simultaneously with this prohibition to impose an increased import duty on matches.

A commission composed of specialists was accordingly appointed to examine "whether in order to check necrosis it was necessary to "prohibit the use of white phosphorus in manufacturing matches, or "whether a decree regulating the construction and management of "match factories would have the desired effect." From the evidence laid before the commission, it was shown that since 1857, when regulations had been first issued in Prussia, the malady had been in many places on the increase. The simple means to stamp out the disease would be to prohibit the use of white phosphorus. Yet it was possible to instance many factories in which proper precautions had been taken, and in which no case of the disease had occurred for years.

A measure of so stringent a nature would cause an undue interference with the trade, and the export of German matches would be exposed to an unfair competition with that of other countries, where no prohibitions, such as those proposed, were in force. It was therefore thought more desirable to regulate the use of white phosphorus, and to frame such a measure as would prevent its employment in household industry, where its effect had been shown to be especially injurious. The efforts of the commission resulted in the law of May 13, 1884, which provides that:—

Law of May 13, 1884.

1. The manufacture of lucifer matches with white phosphorus shall only be conducted in buildings which are entirely devoted to the manufacture of matches. Law of May 13, 1884.

2. Juvenile workman (Section 136 of the Industrial Code) are not to remain in rooms in which—

a. The phosphorus ("Zündmasse") is being mixed.
b. The wood is being dipped.
c. The wood which has been dipped is being dried.
d. Children (section 135, par. 1 and 2, of the Industrial Code) are not to remain in the rooms where the matches are first placed in boxes and packed.

3. A breach of the regulations under section 1, is punishable with a fine not exceeding 300 marks, and with imprisonment in case of inability to pay. Besides this punishment the implements employed in

such manufacture, not being fixtures, shall be liable to confiscation as also the matches so produced.

4. A breach of the regulations under section 2, is punishable with a fine not exceeding 2,000 marks (100*l.*), in case of inability to pay with a term of imprisonment not exceeding six months.

Fines levied under the above regulations will be paid into the fund mentioned under section 116 of the Industrial Code.

5. These regulations shall only apply to already existing factories after the space of two years.

6. The following regulation is to be added to No. 5, *e*, of the Customs Code of July, 1879:—

"Lucifer matches and wax matches are taxed at 10 marks the 100 kilos." This regulation shall come into force from July 1.

Berlin, May 13, 1884.

This law was followed by the declaration of July 11, 1884.

Declaration of July 11, 1884.

Declaration of July 11, 1884.

With a view to carrying out the law of May 13, 1884, respecting the manufacture and taxation of lucifer matches, the Bundesrath, having in regard section 120, par. *e*, of the Industrial Code, have made the following decree, regulating the management of the establishments in which white phosphorus is used in manufacturing lucifer matches.

1. Each of the following operations.

(*a*) Mixing the phosphorus.

(*b*) Dipping the wood.

(*c*) Drying the wood which has been dipped.

(*d*) Placing the wood in boxes and packing it for the first time, must be conducted in special rooms.

These rooms may only be immediately connected with each other and not with other work-rooms, dwelling rooms or business-rooms. Direct communication is, however, allowed between the room where the wood is dipped and where it is laid by, as also between the room where the matches are first placed in the boxes and packed and where the finished goods are stored. Each of the above-mentioned rooms is to be exclusively used for the particular operation to which it is assigned, but the same room in which the wood is dipped (*b*) may also be used for impregnating the wood with sulphur and paraffin.

2. The rooms in which the operations comprised under section 1, *a*, *b*, *d*, are conducted must be at least 5 metres in height, the rooms mentioned under *b* and *d* must have fire-proof ceilings, the drying rooms *c* must be fire-proof throughout. The walls of the rooms in which the operations comprised under *a*, *b*, *d*, are conducted must be covered with a coating of lime, which coating is to be washed off and renewed every six months.

3. The rooms in which the phosphorus is prepared must be so arranged that there is a constant change of air, sufficient to remove all phosphoric exhalations.

The preparation of the phosphorus may only take place in closed air-tight vessels, the mouth of which is so contrived as to serve at the same time as a safety-valve.

Vessels containing phosphorus are to be constantly kept covered.

4. The operation of dipping the wood must be attended with such precautions as shall prevent phosphor exhalations penetrating into the work rooms.

If the material in which the wood is dipped be warm, only such appliances as have been approved by the higher officials shall be used in dipping the wood.

5. The rooms in which the wood is dried after dipping must be well ventilated.

In artificially heated drying rooms the temperature must not exceed 35 degrees Celsius.

In every drying room there must be a thermometer, placed in such a way that it can be read from the outside of the room, upon which the highest temperature which may be reached is clearly marked.

The rooms are only to be cleared out and put in order (if they have to be entered for this purpose) when they have been thoroughly ventilated for the space of half an hour by means of the doors and windows being opened or by means of special artificial ventilation.

6. The rooms in which the matches are placed in boxes and such rooms as are specially used for packing the matches must be so constructed that every workman occupied in them should have breathing space of 10 cubic metres. These rooms must be furnished with windows which can be opened and with suitable appliances for ventilation.

7. The rooms marked under Section 1, *a*, *b*, *d*, are to be cleaned out daily after the conclusion of work. The rubbish is at once to be burnt.

8. The employer must see that the labourers employed in the rooms marked under Section 1, *a* to *d*, wear a special overcoat or an apron which covers them as well above as below the waist.

He must see that the workman on leaving the workrooms take off these garments and leave them in a special separate room.

In this room there must be separate cupboards for hanging up the working clothes and the ordinary clothes, which latter are to be taken off before the commencement of work.

9. The employer must not allow the workmen to bring food into the workrooms or to eat there. He must see that meals are only taken in rooms which are quite separated from the workrooms and from the dressing and undressing rooms. Outside the working rooms there must be appliances for warming food.

10. Outside the workrooms, but close to them, there must be arrangements for washing sufficient for the use of the workmen employed, and also a sufficient number of bowls for rinsing the mouth.

11. The employer must see that the workmen wash their hands thoroughly before taken their meals and leaving the factory; also that they thoroughly rinse out the mouth with water and take off the overcoats or aprons which they have worn during work.

12. The employer may only admit such persons to work in the rooms under Section 1, *a* to *d*, as have received a certificate from a certified doctor that they are not suffering from necrosis, and that they are not particularly liable to this disease.

These certificates are to be kept and shown when required to the inspecting officers (Section 139, *b*, of the Industrial Code).

13. The employer shall entrust a certified doctor, whom he shall name to the inspecting officer, with the inspection of the health of his workmen. This doctor shall, in the course of the first year after these regulations come into force, make a monthly examination of the workmen. He shall afterwards examine them at least every quarter and inform the employer of any case of necrosis.

The employer is bound to inform the inspecting officer in writing of any case of necrosis which has occurred amongst his workmen and come to his knowledge through the doctor or by some other means. He shall no longer employ a workman suffering from sulphur poison in the rooms under section 1, *a* to *d*.

14. The employer is bound to keep a book from which may be seen how long the workmen remain in his service and when they change from it. In this book are to be entered the workman's surname and Christian name and the date when he enters and leaves the service; also the observations of the factory doctor and their date. This book is to be shown to the inspecting officer (139, *b*, of the Industrial Code) when required.

15. In every work-room a copy of section 2 of the law of May 13, 1884, and a copy of sections 1 to 14 of these regulations is to be hung up in a conspicuous place with a notice regarding the precautions to be observed by the workmen in the particular room in which they are occupied. This notice is to be given to every workman employed under section 1, *a* to *d*, when he joins.

16. The manufacture of matches with white phosphorous may only be begun on new premises after their construction has been notified to the proper inspecting officer. This officer shall, as soon as possible after the receipt of this notification, personally inspect the building, and see that its constrnction is in conformity with regulations.

17. In case of a breach of section 1 of the law of May 13, 1884, and of sections 1 to 16 of these regulations, the police may require the suspension of work until the regulations have been complied with.

18. Sections 1, 2, 3, clause 2, and section 6 shall only be applicable to already existing factories two years after the law of May 13, 1884, comes into force.

Exceptions may be allowed to sections 1 and 2, clause 1, of these regulations by the Federal Council in favour of factories which were worked before their publication, and whose existing appliances have been shown to be free from danger.

Berlin, July 11, 1884.

Declaration of July 8, 1893.

Declaration of July 8, 1893.

These regulations were re-enacted with but slight alterations on July 8, 1893.

In section 13 the provision that the workmen should be examined monthly was omitted; the examination was to take place at least quarterly.

Section 18 was also altered as follows:—

The above regulations shall come into force on the day of their promulgation in the place of the Chancellor's declaration of July 11, 1884.

The exceptions granted by the Federal Council under section 18, clause 2, to the regulations under sections 1 and 2, clause 1, remain in force until such time as they may be cancelled.

Berlin, July 8, 1893.

Application of Industrial Code.

Application of Industrial Code.

Beside these regulations, section 16 of the Industrial Code is applied to match factories.

Section 16. In order to erect works which by their position or nature cause any appreciable disadvantage, danger, or nuisance to the neighbouring proprietors or inhabitants, it is necessary according to law to obtain the permission of the proper authorities.

It would appear from the above regulations that the observance of special rules is considered sufficient for the suppression of necrosis, without the prohibition of the use of white phosphorous.

No white lucifer matches may be made except in duly licensed factories which are under proper inspection. The processes of mixing, dipping, drying, and placing the wood in boxes are to be conducted in rooms separate from the rest of the factory. The workmen employed in these rooms are to wear overcoats or aprons protecting them both above and below the waist, and these they must remove before leaving the factory. The workmen are to be under medical inspection, a register is to be kept of their state of health, and no person subject to necrosis is to be employed in the departments where he would be liable to suffer from the effect of the fumes. Workmen are not allowed to eat in the work-rooms. They must be provided with ample means for washing and rinsing the mouth.

xx.—*Explosive Works in which Di-Nitro Benzole is used.*

Last year I inserted the report on Di-Nitro-Benzole, forwarded to you by Dr. Dupré, F.R.S., and Captain Smith, R.N., Her Majesty's Inspector of Factories, after consultation with Colonel Majendie, C.B., Chief Inspector of Explosives.

The following special rules were approved by you in accordance with their recommendations:—

FACTORY AND WORKSHOPS ACT, 1891, SECTION 8.

SPECIAL RULES.

THE MANUFACTURE OF EXPLOSIVES IN WHICH DI-NITRO-BENZOLE IS USED.

1. No person to be employed without a medical certificate, stating that he or she is physically fit for such employment.
2. An examination of the workers at their work to be made at least once a fortnight by a certifying surgeon, who shall have power to order temporary suspension or total change of work for any person showing symptoms of suffering from the poison, or if after a fair trial he is of opinion that any person is by constitution unfit, he shall direct that such person shall cease to be employed.
3. A supply of fresh milk, and of any drug that the medical officer may consider desirable, shall be kept where the workers in his opinion may require it.
4. No meals to be taken in the workrooms.
5. There shall be provided separate lavatories for men and women, with a good supply of hot water, soap, nail brushes, and towels, and whenever the skin has come in contact with di-nitro-benzole, the part shall be immediately washed.
6. Overall suits and head coverings shall be supplied to all workers in shops where di-nitro-benzole is used, these suits to be taken off or well brushed before meals and before leaving the works, and to be washed at least once a week.
7. Suitable respirators (capable of being washed), folds of linen, or woollen material of open texture, or other suitable material, shall be supplied to those workers liable to inhale dust, and the wearing of such respirators shall be urged where the workers derive benefit from their use.

8. Where di-nitro-benzole has to be handled, the hands shall always be protected from direct contact with it, either by the use of india-rubber gloves (kept perfectly clean, especially in the inner side), or by means of rags which shall be destroyed immediately after use.
9. Where di-nitro-benzole is broken by hand, the instrument used shall be a wooden bar, spade, or tool with a handle long enough to prevent the worker's face from coming into near contact with the material.
10. In all rooms or sheds in which the process, either of purifying, grinding, mixing materials of which di-nitro-benzole forms a part, is carried on, efficient "cowls," ventilating shafts, and mechanical ventilating fans shall be provided to carry off the dust or fumes generated.
11. Drying stoves shall be efficiently ventilated, and, when possible, be charged and drawn at fixed times, and a free current of air shall be admitted for some time prior to the workers entering to draw, either a part or the whole of the contents.
12. In the process of filling cartridges, the material shall not be touched by hand, but suitable scoops shall be used, and where patent ventilated cartridge filling machines are not used, there shall be efficient mechanical ventilation arranged in such a manner, that the suction shall draw the fumes or dust away from and not across or over the faces of the workers.
13. A register, in a prescribed form, shall be kept, and it shall be the duty of a responsible person named by the firm to enter, at least once a week, a statement that he has personally satisfied himself that each and all of the special rules have been observed, or if not, the reasons for such non-observance. The surgeon to enter in this register the dates of his visits, the results of such visits, and any requirement made by him.
14. The "dipping" rooms to be efficiently ventilated.

R. E. Sprague Oram,
H.M. Chief Inspector of Factories.

Home Office,
April 1893.

xxi.—*Manufacture of Earthenware and China.*

You directed an inquiry to be made into the conditions under which the manufacture of earthenware and china is carried on, with the object of diminishing any proved ill effects in the health of the workpeople engaged therein. For the purpose of the inquiry, you appointed the Consulting Physician and the Honorary Surgeon of the North Stafford Infirmary, who had spent the greater part of their professional lives in active practice in the Potteries districts; the former (Dr. Arlidge), being the author of "Diseases of Occupations;" Professor Laurie, Gilchrist Lecturer, and some of Her Majesty's Inspectors of Factories, who had had experience in potteries, with Mr. Cramp, Her Majesty's Superintending Inspector for the Pottery district, who had devoted much time and attention to the subject, as secretary. They have made the following report:—

REPORT OF COMMITTEE APPOINTED TO INQUIRE INTO THE INJURIOUS CONDITIONS OF THE MANUFACTURE OF POTTERY, AND THE PROPOSED REMEDIES.

To the Right Honourable HERBERT HENRY ASQUITH, Q.C., M.P., Her Majesty's Principal Secretary of State for the Home Department.

SIR, July 1893.

ON the 21st of April last we were honoured with a commission from you "to make inquiry into the conditions under which the manu-" facture of pottery is carried on, with the object of diminishing any " proved ill effects in the health of the workpeople engaged therein."

To most of us the subject of inquiry was familar, the medical members of the Committee having spent the greater part of their professional life in active practice in the North Staffordshire Potteries District, one of them being also consulting physician, and the other honorary surgeon to the North Stafford Infirmary, and the official members of the Committee having served 15, 7, and 1 years respectively, as Her Majesty's inspectors of factories of this district.

About four-fifths of the persons employed in the manufacture of china and earthenware in the United Kingdom are so employed in the part of Staffordshire known as "The Potteries." We therefore fixed on the central town of the Potteries, viz. Stoke-on-Trent, as the centre of our operations. The processes of manufacture are, in our opinion, fully illustrated by those carried on in this district.

The Appendix A. will show the order of our proceedings, but we may here briefly state that previous reports on the subject, the evidence given before the labour Commission, communications from associations of manufacturers and operatives, letters from individual occupiers of potteries, and from workmen engaged therein, medical reports, and numerous newspaper articles were brought under our notice and duly discussed.

We have examined a large number of workmen, representing nearly all branches of the pottery industry, and taken note of their statements as to the unhealthy nature of the occupation, and their suggestions for remedies.

A large and influential deputation of employers attended one of our sittings, having been deputed to do so by a Joint Committee of the Chamber of Commerce, the China and Earthenware Mcnufacturers' Association, and the Encaustic Tile Manufacturers' Association, and we have received numerous communications from individual employers. In addition we have received evidence from potters' chemists, managers of potteries, colour makers, factory certifying surgeons, and other gentlemen. To all these we tender our very best thanks for their assistance.

The opinions given by the various witnesses were, as might be expected, somewhat conflicting, and we have done our best to arrive at just conclusions by visiting china and earthenware works and judging for ourselves.

In reply to the question as to how far the manufacture of china and earthenware as at present carried on injuriously affects the health of the workpeople, and how far the injurious effects depend upon the age and sex of the operatives, the medical members of the Committee, Dr. J. T. Arlidge and Mr. W. D. Spanton, have drawn up the sub joined report, representing their views on these subjects, and we would also direct attention to the letter from Mr. W. J. Dawes, Medical Officer of Health, Longton, (Appendix C.), and to the evidence of Mr. J. Alcock (Appendix A.).

REPORT ON MEDICAL ASPECT OF THE QUESTION, BY DR. J. T. ARLIDGE AND MR. W. D. SPANTON.

Referring to the instructions to the Committee given by the Home Secretary, opinion is asked as to the ill effects on the health of potters due to the exercise of their trade and the processes pursued in it.

The general truth that the potter's occupation is one fraught with injury to health and life is beyond dispute, and in dealing with the trade in its medical aspects, it seems necessary to show how the injury is brought about, and by what measures it may be mitigated and removed.

The ill effects of the trade are referable to two chief causes, viz., dust and the poison of lead. The former is of wider action, as it pervades all the operations or processes wherein potter's clay and flint in powder are in use. The latter prevails in the lesser departments of work concerned in the glazing and colouring of the ware after it leaves the hands of the potter properly so called.

A third but less potent cause exists in the operations necessary to the completion of the ware by firing.

First. Of the Dust of Potter's Clay and of Flint.—This is noxious by inhalation, by finding its way into the lungs, to the tissue of which it operates as an irritant, setting up inflammatory action and ending in gradual consolidation and abolition of the functions of those organs.

The mischief done is manifested by the production of cough and expectoration, with advancing difficulty of breathing, and accompanied by wasting and weakness, a group of symptoms assimilated to those of pulmonary consumption.

Consequently the prevalence of bronchitis and asthma among potters affords a key to the proportion in which they suffer from their occupation.

Analysis of the mortality returns for males above 14 for the year 1890 of the parish of Stoke-on-Trent, including the county borough of Hanley, the boroughs of Longton and Stoke, and the large town of Fenton, shows that, of the total mortality from all causes among potters, bronchitis accounted for 42 per cent., pneumonia and pleurisy 8 per cent., pulmonary consumption 21 per cent.

Grouping bronchitis with lung inflammation, the result thus stands that in the case of potters 50 per cent. died from chest diseases, as distinguished from pulmonary consumption, which on its part carried off 21 per cent.

Employing the same data, an analysis of the deaths of males above 14 not employed in any form of pottery labour, but living in the same district, the finding is that the diseases of the chest produced 26 per cent. and pulmonary consumption 14 per cent.; showing a very considerably higher ratio of those maladies, to the entire mortality of males in the district, among potters than among non-potters.

The higher mortality of potters is evidenced in another way, viz., that the ratio of deaths ascribed to senile decay among potters is 4·5 per cent., and with non-potters 12·5 per cent.

Another result of the same analysis is, that whilst the average age reached by potters was 48, that attained by non-potters was 53 years.

Extending the inquiry to the divisions of pottery labour it appears that, in the case of *pressers*, bronchitis was the cause of death in 47 per cent., and other lung diseases in 7 per cent., showing that this class of workmen suffer to a greater extent by its form of work than do other potters from like maladies.

The same holds true of pulmonary consumption; for whereas with potters at large the per-centage of the mortality from this cause was 21 per cent., it reached 29 per cent. with pressers.

The busines of pressers as a class of artisans is recognised as more dusty than that of other potters, and at the same time statistics prove them to be more frequent victims of lung maladies.

In the same way potters are generally more exposed to dust, and that of unusually irritant character, than other men following other occupations, and show a preponderating prevalence of chest lesions, although among the latter there is a fair proportion of miners who inhale coal dust, besides many workmen whose employment is for other reasons admittedly unhealthy.

The inference is consequently unavoidable, that potters suffer an excessive mortality in following their occupation, and that the mineral dust they inhale is largely accountable for it.

The workpeople exposed to flint dust are, compared to those subjected to the inhalation of clay dust, very few in number. Those most exposed are the china scourers—all females—who brush off the the flint powder adherent to china after its removal from the oven. Other sufferers are exemplified by china placers, by men employed in sifting flint, and by the few who "flint" the ware before it is "placed."

All these suffer greatly by flint dust inhalation, and above all the scourers, who break down for the most part within a few years, though some resist the deadly effects for several years.

The number of flint workers is few, and no precise data have been collected for them to furnish the basis for statistical inferences.

In all the employments mentioned where dust is the active agent in inducing disease, the problem is how best to prevent its production, and when produced how to disperse and remove it from the vicinity of the workpeople.

Now its production may be largely obviated by cleanliness in work, by avoiding the scattering of particles of clay, by arrangements for removing waste fragments, by great attention to the cleanliness of working places, by keeping the temperature of shops as low as practicable, so as to avoid the rapid drying of the clay, and by sprinkling the floors with water.

The protection of the workers from the inhalation of dust is best secured by efficient ventilation and ample working space, the former by affixing fans to withdraw dust from the shops and to obtain proper circulation and movement of the air.

Where fans and the necessary motive power are available, the construction of enclosed work-boxes for the use of those employed in "fettling" and "towing," with exhaust draughts of air, to cleanse the ware from dust and to forcibly extract the dust given off, supplies a very efficient plan for saving the workmen from dust inhalation and its evils.

Some means similar in principle are needed for all those using flint in powder.

What shall be the appliances best adapted to each kind of occupation pursued, and most effectual for the purpose, is a problem for engineers, who will avail themselves of the instruction and technical knowledge of the manufacturers.

Still, with or without the intervention of the engineer, the co-operation of the workpeople is essential to effecting any improvements that shall amend their state of health and their longevity. Hitherto such co-operation has been very imperfectly given.

Lead Poisoning.—It is clear from inquiries made by this Committee that a large part of the mortality from lead poisoning is avoidable; although it must always be borne in mind that no arrangements or rules with regard to the work itself, can entirely obviate the effects of the poison to which the workers are exposed, because so much depends upon the individual and the observance of personal care and cleanliness.

There are several ways in which the poison can be introduced into the system. It is sufficiently proved that dust charged with lead finds its way usually through the stomach, and also, in all probability, through the respiratory passages. When in the form of moist glazes it also enters through the skin.

It undoubtedly gains access into the body by;

(*a.*) Eating food with unwashed hands or partaking of it in the rooms where lead is dealt with;

(*b.*) Neglect of cleanliness of clothing;

(*c.*) Allowing glaze and colours to drop about, become dry, and so form dust that gets inhaled;

(*d.*) Holding the pencil used in painting in the mouth, as is often done by majolica paintresses;

(*e.*) Rubbing the eyes with dirty hands;

(*f.*) Near sightedness, causing the workers to be too close to their work;

(*g.*) Some constitutional idiosyncrasy producing excessive susceptibility to the poison of lead.

At the same time, experience proves that many persons using lead glazes and colours work for a long series of years without manifest injury to their health. These are the careful ones. On the contrary many break down quickly; this is especially the case with young women and lads, with whom the influence of sex and age is a factor to be remembered, apart from that of careless habits. Another of some import is that of being ill fed and debilitated.

It is easy to tell at a glance between those likely to resist the action of the poison or to succumb to it, by noting their personal cleanliness, their clothes, workplaces and other surroundings.

Those employed in mixing glazes and colours, if observant of ordinary precautions, seldom suffer, although much exposed to the poison.

The sole use of "fritted" or fused lead has been advocated on the supposition that it is innocuous, but this belief must at present be considered not proven, as sufficient experiments have not yet been made.

The following statistics, prepared by Mr. Hordley, the secretary of the North Staffordshire Infirmary, show the comparative number of indoor patients treated in that institution, in a series of years, for lead poisoning, or plumbism, among potters, and also the per-centage of patients admitted.

Table I.

North Staffordshire Infirmary.—Table showing Number of Lead Cases admitted in proportion to other Admissions, with Occupations and Number of Deaths in various Years from 1870 to 1891.

Year.	Total Patients.	Total Lead.	Recovered.	Died.	Dippers.		Placers and Ovenmen.		Dipping House.		Paintresses.		Glost Warehouse.		Ground Layer and Colour Grinder.		Other Trades.	Total Lead Cases.	Proportion of Lead Cases per Cent.	Remarks.
					M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.				
1870 } 1871 }	2,528	*39	—	—	5	4	14	—	8	4	—	—	—	3	—	—	1	38 2 years	1·50	These figures show that while lead cases during the first seven years recorded constituted 1·71 per cent. of the whole number of patients admitted, during the last five years they formed only 1·03 per cent. of the whole—a very striking diminution.
1879	1,434	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2·02	
1880	1,370	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1·60	
1881	1,401	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1·64	
1883 } 1884 }	3,173	*51	48	3	9	—	8	—	7	13	—	6	—	1	1	1	5	46 2 years	1·44	
1885	1,526	33	32	1	3	—	8	—	1	9	—	7	—	3	—	—	2	31	2·03	
1886	1,717	30	[illegible]9	1	10	1	1	—	2	7	—	9	—	—	—	—	—	30	1·74	
1887	1,512	15	15	—	1	—	5	—	3	2	—	2	—	1	—	—	1	14	·99	
1888	1,551	15	13	2	4	—	4	—	1	2	—	1	—	—	—	1	2	13	·83	
1889	1,651	21	20	1	1	1	6	—	1	4	—	2	—	2	—	—	4	17	1·02	
1890	1,700	21	21	—	4	1	2	—	1	5	—	3	—	1	2	1	1	20	1·17	
1891	1,728	20	20	—	3	—	2	—	3	8	—	3	—	1	—	—	—	20	1·15	

* Two years.

Compiled by Mr. F. B. Hordley, Assistant Secretary.

Another table, prepared by the kindness of Mr. E. J. Hammersley, the secretary, represents the ratio of lead cases among the members of the North Staffordshire Provident Society, who are very numerous and for the most part dwellers in the potteries.

Table II.

North Staffordshire Provident Association Returns, showing :—

Year.	Total Paying Members.	Total Sick from Lead.	Total Sickness in Weeks.	Total Lead Sickness in Weeks.	Per-centage of Lead Weeks to Total Weeks.	Per-centage of Lead Cases to Total No. of Members.		Remarks.
1864	579	9	856	—	—	1·55	Average per annum for 7 years 1·42.	This Table shows that so far as this society is concerned there has been a steady annual increase in the number of members, a much larger progressive decrease in the numbers suffering from lead poison, and during the last eight years *no* death ascribed to it.
1865	594	10	907	—	—	1·68		
1866	665	8	883	—	—	1·20		
1878	1,417	14	2,098	—	—	·98		
1881	1,534	23	2,914	—	—	1·49		
1883	1,688	31	2,970	—	—	1·83		
1884	1,758	22	3,099	—	—	1·25		
1885	1,838	13	3,145	—	—	·70	Average per annum for 8 years ·74. No deaths.	
1886	1,953	3	3,419	34	·99	·15		
1887	2,038	19	3,962	138	3·48	·93		
1888	2,206	25	4,212	154	3·65	1·13		
1889	2,415	35	4,287	188	4·38	1·03		
1890	2,606	22	5,241	50	·95	·84		
1891	2,828	19	5,271	62	1·17	·60		
1892	3,000	17	6,510	93	1·42	·56		

The general outcome of these tables is, that there is less prevalence of plumbism among the pottery population than in past times, and this, notwithstanding a growing number of factories and of workers. Inquiries, moreover, made among medical men of the district indicate it as the general opinion, that there are fewer severe cases, and that these are chiefly confined to dippers; whilst as to slighter ones they occur mainly among young persons. It is, however, fair to note that the diminution of plumbism of late years is partly due to the reduced production of majolica ware during the last five years, and also to the enforcement of orders of Secretary of State of December 1882, prohibiting the taking of meals in majolica painting shops.

The higher rate of wages obtainable by dipping-house labour acts as an inducement to women and young persons to engage in it, and also to continue to work even when aware of its ill effects upon their health; and it becomes a subject for serious consideration whether a periodical examination should not be insisted upon in the instance of all workers with lead, to be made by the certifying surgeons visiting the factories.

The *third division* of pottery labour chargeable with injurious consequences to the health of the employed, is that concerned with the firing of the ware.

Those engaged in it are placers, ovenmen, and kilnmen, with assistants, the latter mostly youths, who feed the furnaces.

Among these the injurious conditions that obtain are flint dust, the poison of lead, the heat from the furnaces, and the gases and dust thrown off.

Flint dust belongs to china placing only, the articles in china being packed in it, within the saggars.

It likewise falls to the lot of men working in this department to sift the powdered flint. The action of this dust has been already sufficiently noted, and no special remarks are needed concerning the dust and gases proceeding from the oven furnaces.

The leading feature of this division of pottery work is the heat to which men are exposed when occupied in drawing the ovens. The conical shape of the ovens causes the heat to be greater at their upper part, where, as a matter of course the removal of the superimposed series of saggars must be begun. The weight of the saggars, filled as they are with ware, is very considerable; and this coupled with the use of ladders to reach the topmost rows, renders the labour one of great fatigue, whilst the actual heat is aggravated by more or less vapour, charged with some sulphurous gas which accumulates at the upper part of the oven.

The conditions of oven-labour are productive chiefly of rheumatic affections; and now and again men suffer from serious exhaustion from heat and physical exertion. Dust, and much needless exposure to draughts and alternations of temperature, concur, also, in developing bronchial attacks, and the ill effects of the occupation are augmented very frequently by the recklessness and carelessness of the workmen.

Whilst on this subject of heat, some remarks on the temperature of workshops may be permissible.

In former times shops were warmed by circular iron stoves, known as "stove pots," fed through a door and discharging their smoke up a chimney.

In consequence they somewhat improved ventilation.

At the present day these stoves have been replaced in all large potteries by steam pipes. In the absence of proper care an excess of heat is at times produced, and its ill consequences are increased by the want of adequate provision for the introduction of fresh air, and by the folly of the workmen in closing apertures for its admission, and in interfering with the best devised apparatus for securing ventilation. And it appears that on the part of the employed there is a general feeling of dislike to shops heated by pipes, as causing languor and otherwise damaging their health. But whatever be their evil effects, these are augmented materially by the prejudices of the men against admitting the external air into their shops and by carelessness in regard to exposure to the weather outside, often with insufficient clothing, when passing from their heated places of work.

General Remarks and Suggestions.—In what has preceded, attention has been chiefly directed to statistics indicative of the diseases and mortality of potters, and then to those incidental conditions of their labour inimical to health. There is room, however, for some general reflections relative to accidental surroundings and their influence upon their health.

A general review of the facts adduced seems to show that there has not been, in the course of the last 20 years, that degree of improvement in the general health of potters which might have been hoped for, though happily a certain measure is apparent in some directions, as, for instance, in reduction of plumbism.

If the general sanitary state of the Potteries has been ameliorated, the full benefits to the workpeople have been lost by unfavourable

circumstances of other kinds. In the first place, the population of the district has become denser, what were open spaces for the circulation of air have been intruded upon by multiplied habitations, and small plots of ground formerly available for cottage garden have been built over depriving the artisans of the benefit of outdoor exercise and of a source of interest outside their calling.

This change has exercised another effect upon them, and led them to seek more largely for diversion in town-made places of entertainment where the heated and vitiated air of workshops is exchanged for other and no better. A larger proportion reside at remoter distances from the seat of work, and to reach it prefer travelling by rail or tram to and from their homes in place of walking.

Active outdoor exercise is thereby discouraged, and the artisan who travels by public conveyance risks catching cold in passing from his hot workshop and journeying in a more or less cold and windy carriage.

Another incident not salutary is the greater press of labour, fostered by the introduction of machinery, and with it the heating of workplaces by steam pipes; moreover, proper ventilation is too often not provided for, and the air in consequence is stagnant and laden with impurities derivable from the workers and their work.

A few other suggestions originate from statements made by the men, and from sanitary considerations.

The process of ground laying should not be performed in a room where other operations are carried on.

The sifting of flint should be carried on within a covered chest and the flint diffused in the air be withdrawn by some efficient extracting mechanism, such as a fan.

Shops situated in the basement, more or less below the level of the adjacent ground, are usually damp, ill ventilated, ill lighted, and altogether unfit for occupation. It seems, therefore, on sanitary grounds, they should be interdicted.

Many old factories are wholly, or in part, unfit in a sanitary point of view for occupation, and there should be some authority to close them, or whatever part of them is condemned, on the same principle as dwellings are declared uninhabitable.

The work of lathe-treading should be disallowed for young females under the age of 16.

The "wedging" of clay should not be done by lads under 13 years of age, nor by girls under 16. It is very unsuitable labour in all respects for females.

It is sufficiently established that lead may provoke miscarriage when a woman is pregnant, and likewise operates prejudicially upon the unborn child, if it survives its birth. It is therefore undesirable for married women to be employed in processes where lead is used.

The collecting of ware on shelves above the heads of the workers in a shop should not be allowed, and in general the retention in the shops of disused moulds or of articles of pottery serving no present purpose should be avoided.

The hot closets in pressers' shops should be closed by a double door, as experience proves may be done with advantage.

The blowing of ware by the mouth of women employed in fettling, in the absence of machinery to effect the same end, is not sufficiently shown to be attended by ill results.

The rule proposed on the part of the workmen that it be forbidden to use boards for carrying ware after their employment in the dipping house, involves a minuteness of supervision beyond attainment by the

factory inspectors. The exercise of common sense and observance of cleanliness on the part of the employed should overcome all possible evils arising from such a source.

J. T. Arlidge.
W. D. Spanton.

With reference to the further question referred to the Committee as to "whether the alleged injury to health caused by the existing processes can be diminished by an extension of the present regulations or by legislation," we have carefully considered the "special rules" already drafted and submitted to us, and have taken the opinions of employers and employed upon them, and from consideration of this evidence and the reports presented to us, and also as the result of our observations whilst visiting potteries, we beg to submit the special rules in an amended form, and to recommend their adoption.

Reference to the notes of our proceedings (Appendix A.) will show that we have discussed all the points brought before us by masters and workmen, and a comparison of the rules submitted to us with those we have adopted, will show that we have made no alteration whatever in Rules 1, 9, 11, or 12, verbal alteration only in Rule 4, slight additions to Rules 2, 3, 5, 6, 10, and 13, added a new Rule 8, and have struck out of Rule 7 the part relating to heat of ovens at time of drawing, and recast the rule in as far as it deals with the temperature of potters' shops.

We are of opinion that if these special rules are established and enforced in each pottery in the kingdom, the injurious effects of the various processes will be very greatly diminished.

Factory and Workshop Act, 1891, ss. 8, 9, 10, 11, 12.

SPECIAL RULES.

The Manufacture of Earthenware and China.

Duties of Occupiers.

1. They shall not allow any child under 14 to be employed in the dipping house or dipper's drying room, or in any processes of ware cleaning after the dipper, glost placing, china scouring, ground laying, or majolica painting, or in any process in which lead is used.

2. They shall provide suitable overalls and head coverings for all workers employed in the places and processes referred to in rule 1, and shall have the said articles washed on the premises, and shall also provide a place in which the workers can deposit clothing put off during working hours.

3. They shall not allow any persons (either adult males or others) to cook or partake of any food, or to remain during meal times in the dipping house, dipper's drying room, china scouring room, glost placer's shop, ground-laying shop, or majolica-painting room.

4. They shall adopt efficient measures in the processes of towing of earthenware and of the scouring of china for the removal of all dust and flint by fans or other mechanical means; and in all dusty processes they shall adopt measures for dealing with avoidable dust, and for the prevention of any injurious effects arising therefrom, either by the use of mechanical fans or other efficient means.

5. They shall provide brooms, brushes, and all other necessaries for the daily sweeping of floors of workshops and of such stoves as are

entered by the workers, and for the cleansing of work benches and of stairs leading to workshops; and shall arrange that the floors of such workshops and stoves are sprinkled and swept every working day, and the scraps and dirt removed, and that work benches and stairs are cleansed at least once a week. The daily sweeping of floors of potters' shops shall be done after work has ceased for the day, unless there is some sufficient reason to the contrary.

6. They shall provide washing conveniences with a sufficient supply of water, soap, nail brushes, and towels, for all workers employed in the places and processes referred to in rule 1; and the washing apparatus shall be in convenient proximity to the work places.

7. They shall arrange that the temperature of potters' workshops outside the drying stoves, when people are working there, shall not exceed 80° F. if the outside temperature is below 70° F.; and when the temperature outside is above 70° F., the inside temperature shall not be more than 10° higher.

8. They shall not allow any female under 16 years of age to be employed at treading the lathes used by turners.

Duties of Persons employed.

9. Every person to whom is supplied an overall suit or head covering shall wear the same when at the special work for which such are provided.

10. Every person employed in the places or processes enumerated in rule 1 shall carefully clean and wash his or her hands and face before meals and before leaving the works.

11. Every person employed in dipping, carrying ware from the dipper, cleaning ware after it has been dipped, glost placing, china scouring, ground laying, majolica painting, or in any process in which lead is used, shall during the meal times leave the shops in which those processes are carried on, and shall not cook or eat any food therein at any time.

12. The measures taken by the employers for the ventilation of the various workrooms and stoves and for the removal of dust, shall not be in any way interfered with by the workpeople without the knowledge and concurrence of the employer or manager of the works.

13. Every male or female worker shall be responsible for the cleansing of that portion of the room in which he or she is employed, and shall see that the floors of shops and of such stoves as are entered by the workers are sprinkled and swept, and the dust, scraps, ashes, and dirt removed every day, and that the work benches and stairs are cleansed at least once a week. The sweeping of floors of potters' shops shall be done after working hours, either by themselves (*i.e.*, the workers) or by an adult male employed and paid by them and approved by the employer.

As to *new legislation*, the Committee deem it desirable that power should be given to some authority, imperial or local, to condemn such factories or parts of factories as are unfit for work. There are potteries which cannot be made fit for use owing to their bad structural arrangements or dilapidated condition.

With reference to the question how far the health of the workers would be improved by the introduction of new manufacturing processes, the Committee have devoted their attention to the problem of modifying the method of glazing earthenware so as to remove or diminish the danger of poisoning by lead.

At present the raw glaze in which the ware is dipped is a mixture in water of flint, stone, a "fritt" compound of borax and other ingredients,

and white lead or red lead. These lead compounds, especially the white lead or carbonate of lead, are known to be very dangerous on account of their easy solubility, and two suggestions have been brought before us with a view to meeting the evil.

One suggestion is, that only leadless glazes should be used on earthenware.

After carefully considering the evidence before us, we do not see any immediate prospect of such glazes becoming universally applicable to pottery manufacture, and we have therefore devoted our attention to the second proposal laid before us, which is as follows:—As already stated, some of the materials used in the glaze are added in the form of a fritt, that is, have been fused together at a high temperature into a coarse glass which is ground before use. It is proposed that all the lead required in the glaze should be first fused with these other ingredients, and only this "fritted lead" used in the glaze. In this way, it is suggested, the lead will be present in an insoluble, and therefore harmless, form, and yet the properties of the glaze will remain unaltered. As this process seemed to involve no very great alteration in the present methods of manufacture, we thought it worthy of our careful examination.

As will be seen in the appendix, the opinions of manufacturers differ considerably on the question.

Some firms are now fritting all their lead, and claim that it is an improvement on the older methods; others do not regard it as practicable.

However, the fact that more than one important firm is using it for all classes of work, shows that it is reasonable to suppose that the fritting of lead might ultimately be found universally practicable. We therefore decided to test for ourselves how far such fritted glazes were really to be regarded as non-poisonous, and with a view to throwing light on this question, requested Mr. Laurie to expose samples of lead fritt supplied by manufacturers to conditions as nearly similar as possible to those existing in the digestive organs.

The following is his report—

Report on the Properties of Lead Fritts.

It is customary in making up the glaze for pottery ware to add a considerable quantity of white lead or red lead. Mr. Laurie's Report.

The white lead is more commonly used, and is recognised as being a very poisonous lead preparation on account of its easy solubility in the juices of the stomach. Now it also is usual to add to the glaze a certain amount of "fritt," that is, of constituents fused at a high temperature into a rough glass, and it has been suggested that if all the lead required was fused up in this fritt it would then exist in a practically harmless form.

Some important evidence was brought before the Committee tending to show that such fritts were harmless, and it therefore seemed of importance to examine how far the lead in these fritts could be regarded as being present in a form insoluble in the stomach. I was therefore requested to apply certain tests with the view of throwing further light on the question.

I therefore obtained samples of fritts in actual use, and submitted them to examination. In applying the tests I have been guided by the experiments published by Dr. Oliver in his work on lead poisoning.

He there describes experiments showing that carbonate of lead is soluble both in the gastric juice and the bile, and he further proves that the active agent in the gastric juice is the free hydrochloric acid it contains, the pepsine exerting no influence.

I decided, therefore, to experiment on these fritts, both with bile and with weak solutions of hydrochloric acid, with a view to testing their solubility.

The first glaze I selected was some supplied to me by a manufacturer out of the dipping tub. It had therefore been very finely ground in water, thus rendering it more liable to be dissolved, and it consisted of a mixture of flint and stone, with two fritts, one containing about 16 per cent. of lead, and the other 30 per cent. of lead. I repeated with this material, the experiments made by Professor Bedson for Dr. Oliver on carbonate of lead, treating it with bile, in a "diffusion tube" for several hours at a temperature of 100° F. to 110° F., without dissolving out any trace of lead; thus showing that the lead it contained was not soluble in bile.

My next experiment was to treat it with weak hydrochloric acid. I found it necessary, however, to wash it first with water, as the water it was mixed with was strongly alkaline. After washing and drying, I treated 1 gramme with 50 cc. of hydrochloric acid, containing ·3 per cent. of acid. I selected this strength of acid partly because it had been used by Dr. Oliver in his experiments, and partly because I thought it advisable to use an acid rather stronger than that present in the stomach, as the conditions for solution are probably much more favourable in the stomach than in a laboratory experiment. I found that on digesting for some time at 100° F. a considerable quantity of lead had been dissolved. Evidently, then, these fritts were not insoluble in weak acid, as I had hoped, and it became necessary to determine to what extent they were soluble as compared with other lead compounds.

I therefore determined to test them under similar conditions against a substance to be taken as a standard of solubility, and I selected for this purpose sulphate of lead. This substance is regarded by the medical profession as practically innocuous because of its insolubility. It is, however, slightly soluble in weak acid, though apparently not to a serious extent.

In each case, 1 gramme of the substance was treated for three hours, at 100° F., with 50 cc. of ·3 per cent. hydrochloric acid. There was thus a large excess of free acid present, and the time and temperature corresponded roughly with the digestive process.

The results were as follows:—

Material used.	Percentage of Raw Lead put in Fritt.	Percentage of Borax put in Fritt.	Percentage of Metallic Lead dissolved from 100 Parts of the Material used.	Per centage of the whole Amount of the Lead present in the Material which was dissolved.	Remarks.
Lead sulphate	—	—	1·21	1·77	——
Glaze from dippers' tub made up of two fritts.	Not known	Not known	6·67	—	A mixture of Fritts No. 1 and No. 2, with flint and stone.
Fritt No. 1	16·0	28·8	5·41	33·8	——
Fritt No. 2	30·0	10·7	1·13	3·7	This fritt analysed, and found to contain 30·3 per cent. of lead.
Majolica fritt	60·0	None	7·78	12·9	This fritt is a silicate of lead, free from borax.
Fritt No 3	28·9	Not known	5·61	21·6	Analysed and 26·0 per cent. of lead found.
White Lead	—	—	41·23	—	That is, the acid dissolved the carbonate until saturated. More acid would have taken up more carbonate.
Seven grammes of a common tea-cup ground up,	—	—	0·21	—	——

On examining this table it is obvious that all these fritts are much better than raw lead, being much less soluble in weak acid, and therefore less dangerous to introduce into the stomach.

On the other hand they differ a good deal in solubility, and are in most cases, more soluble than lead sulphate.

The solubility in acid evidently depends on two things, an excess of lead and an excess of borax.

For instance, the majolica fritts, while free from borax and containing nothing but the much more insoluble silicates of lead, but with a large quantity of lead present, dissolves to the extent of nearly 8 per cent.

On the other hand, if No. 1 and No. 2 fritts are compared, it is evident that, although No. 2 has double the amount of lead, it is less soluble. While No. 1, with half the amount of lead, but three times the amount of borax, is more soluble.

It is therefore, evidently of importance, in order to obtain a perfectly safe fritt, to limit the amount of borax as well as of lead in the fritt.

While, therefore, fritting the lead no doubt diminishes the danger of lead poisoning for the workers, yet we cannot regard all fritts as equally innocuous, nor could we assume any fritt to be as harmless as lead sulphate, without first examining how far it is soluble in weak hydrochloric acid. I think, therefore, that it would be as well for the Home Office to suspend for a time, its judgment as to how far a harmless preparation for glaze can be enforced, and in the meantime everything should be done to encourage the manufacturers to continue their experiments in fritted lead, both with a view to obtaining a satisfactory glaze and to having the lead present in as insoluble a state as possible.

Doubtless in this way a quiet revolution in the method of manufacture might be brought about, to the great benefit of the workpeople employed.

A. P. Laurie.

An additional report from Mr. Laurie, giving the results of further experiments on the solubility of fritted lead will be found in Appendix K., page 175.

The Committee recommend that steps be taken, by circular from the Home Office or otherwise, to bring before manufacturers the advisability of experimenting with, and testing the use of, glazes and colours in which all the lead has been fritted, and their effect upon the health of the workpeople. Also that the Committee should be empowered to continue investigations as to the composition of glazes and colours, with a view of finding out how far it is practicable to make a glaze that shall be harmless to those employed in the manufacture, and at the same time shall not injure the ware.

Further information is also required as to the temperature of potters' workshops and of ovens at time of drawing the ware, and the Committee have requested their colleague, Her Majesty's Inspector of factories of the district, to make continued observations and records. We have already, in Rule 7, attempted to deal with the temperature of workshops, but do not consider the rule in its present shape as final, as we have fixed the limits of temperature very wide, and do not feel justified in going further at present. The enforcing of the rule in its present shape, will throw further light on what is or is not practical in this direction. The Committee trust that the effect of the rule will be that the moist heat of the drying stoves will be carried to the open air and not allowed to enter the workshops.

As to the ovens or kilns, no evidence of a sufficiently conclusive character was produced as to the temperature of ovens at the time of

drawing the ware, and looking at the difficulty of enforcing a rule on the subject, and the fact that the persons who draw ware from the ovens are adult males, the Committee decided not to recommend any rule on the subject at present.

Many matters not covered by the special rules were discussed by the Committee, and rules on the subject either decided to be impracticable, or, when proposed, were lost by failure to secure a majority.

Two of these subjects, however, the Committee desire to press on the notice of the authorities and of the employers, viz.:—The desirability of providing mess rooms for the workers, who will be prohibited by Rules 3 and 11 from having meals in the workrooms, and who live at long distances from their places of work; and the desirabilty of a periodical examination, by the certifying surgeon or other medical man, of all workers in processes in which lead is used or poisonous dust is generated.

The results of our inquiry appear to us, Sir, to justify your action in having declared "processes in the manufacture of earthenware to be "dangerous or injurious to health," and we trust that they may also assist the Chief Inspector of Factories in suggesting the precautions necessary te remove or mitigate the dangers.

If it should be decided to adopt and enforce the "special rules" we have recommended, we hope that manufacturers and workpeople will acccept them and cheerfully obey them, with a view of taking away from one of the most beautiful, interesting, and useful of our manufactures, the reproach of being also one of the most unhealthy.

We have the honour to be, Sir,
Your most obedient Servants,

SAM. W. MAY,
H.M. Superintending Inspector of Factories, Chairman of Committee.

JOHN T. ARLIDGE,
M.D. and A.B. (Lond.), F.R.C.P. (Lond.). J.P. for County of Stafford.

W. DUNNETT SPANTON, F.R.C.S.E., J.P. for County of Stafford.

A. P. LAURIE, M.A., B.Sc., F.R.S.E., Fellow of King's College, Cambridge, Gilchrist Lecturer.

J. H. WALMSLEY, H.M. Inspector of Factories.

WM. DAWKINS CRAMP, H.M. Superintending Inspector of Factories, Secretary.

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APPENDIX A.

Secretary's Notes of the Proceedings.

By letter dated 21st April 1893, the Secretary of State appointed the following a Committee to make inquiry into the conditions under which the manufacture of pottery is carried on, with the object of diminishing any proved ill effects in the health of the workpeople engaged therein.

Dr. J. T. Arlidge, J.P., Stoke-on-Trent.
Mr. W. D. Spanton, J.P., Surgeon, Hanley.
Mr. A. P. Laurie, Chemist, London.
Capt. S. W. May, R.N., Wakefield.
Mr. J. H. Walmsley, Stoke-on-Trent, and
Mr. W. Dawkins Cramp, Birmingham.
The last-mentioned to act as secretary.

May 29, 1893. First Day.

Meeting at North Stafford Hotel, Stoke-on-Trent.

Present: all members of the Committee.

Capt. S. W. May, R.N., voted to the chair.

It was decided that the meeting should be private, and that the request of the newspaper reporters to be allowed to attend should not be granted; also that the services of a shorthand writer were not necessary.

The secretary read letter of appointment, the scope of inquiry was defined, and order of pr oceedings arranged.

The Labour Commission Reports, "Daily Chronicle" articles, and Mr. Cramp's report of November 1892 were brought under consideration, and replies from manfacturers' associations, operative potters' associations, and communications from individual operatives and manufacturers were read and discussed. The secretary also read a despatch from Sir E. Malet as to the use of lead in German manufactories, a report of interview of Messrs. Owen, Pickin, and Edwards with Mr. H. J. Gladstone, and letter from Dr. Arlidge.

The questions of automatic and mechanical ventilation and of lead poisoning were then discussed. It was arranged to receive evidence from operatives' associations and other workers the next day, and from manufacturers' association on Wednesday. Arrangements were also made for evidence to be received from M. Arnoux and Mr. G. Leason, of Minton's, Limited. A list of potteries to be visited on Thursday was drawn up, and the secretary requested to make arrangements. The secretary gave a short report of the proceedings of the day to the reporters of three newspapers. Mr. Laurie and Mr. Walmsley visited potteries in Stoke.

May 30, 1893. Second Day.

Meeting at North Stafford Hotel, Stoke-on-Trent.

Present: all members of the Committee.

Capt. S. W. May in the chair.

The following attended to give evidence:—

Mr. W. Owen, secretary of Operative Potters' Committee and National Order of Potters.

Mr. Thomas Pickin, secretary of Hollow-ware Pressers' Society and Sanitary Pressers and Mouldmakers.

Mr. Thomas Edwards, secretary of Ovenmen's and Saggar Makers' Society, representing also the dippers.

Mr. John Goodwin, secretary of Printers' and Transferrers' Society.

Mr. John Foster representing the flatpressers.

There were also present 11 workmen, mostly those who had suffered from lead poisoning, dust inhalation, excessive heat, or defective ventilation.

The examination of the witnesses was conducted on the lines of the proposed special rules, then of subjects not included in the special rules, and lastly of lead poisoning.

Rule 1. *Child under 14 not to work in process where lead is used.*—Workmen agree, except that Mr. Edwards "would like the age to be 21 for "those actually engaged as dippers. The men employed as dippers die off "very rapidly, and the introduction of youths into the dipping houses "produce very bad results. More youths than men are now employed "as dippers, and if the Committee believe that youths are more sus- "ceptible than men to lead poisoning, they should be prohibited."

Rule 2. *Occupiers to provide overalls and head coverings for workers in processes where lead is used.*—Workmen agree to rule as drafted, but think that the overalls, &c. should be washed on the factory premises.

Rule 3. *Prohibition as to taking meals in certain shops.*—Workmen agree, but think that manufacturers should provide meal rooms, as the workers have nowhere to go for meals. In a factory at Fenton 7 out of 10 live at Tunstall. Suggest the addition of the words, "except in an apartment provided for the purpose." Mr. Edwards does not approve of "glost placers" being included; but all agree that ground layers should be included.

Rule 4. *Mechanical means to be adopted for removal of dust in towing and china scouring, and efficient means to prevent dust inhalation generally.*—*Mr. Owen* is of opinion "that the word superfluous" before dust is unnecessary, and gives a chance for misinterpretation. In all processes in which dust is generated, mechanical means should be applied to remove the same. He still objects to workers having to blow dust off with their mouths, but would be willing to limit a prohibition as to this to "towing." The fans should be so constructed as to draw away the dust and also to blow it away, as at Mr. Turner's pottery. At a Hanley pottery the women are forced to "blow," and at a Burslem pottery blow pipes were put in, and were taken away because of the expense of the royalty on the patent. The men suggest, therefore, that "blow pipes" should be enforced. As to whether a rule enforcing "efficient means" would not do, there is a good deal in the idea. But in judging what is efficient or not, he would like meetings of manufacturers, operatives, and factory inspectors.

Mr. Edwards said that "in china works, the sifting of flint and the "placing of china are dusty and injurious processes; and that it is a "bad arrangement to dip, dry, and clean ware in one and the same "place."

Mr. Foster thinks that the "towing" might be done away with. The witnesses generally agree that in such shops as hollow-ware pressers' thorough ventilation is wanted, not fans to each bench. Mechanical fans are necessary in china scouring, but to provide them and the necessary power to drive them would probably cripple small manufacturers, which the operatives have no wish to do. They wish that the local factory inspector should be empowered to select the best fan, and that there should be some authority to judge as to the efficiency of a fan when it is put down. (It was pointed out that such questions will arise, and must, if possible, be arranged by masters, workers, and inspectors, with, if necessary, an appeal to the magistrates.) Workmen complain of inefficient ventilation, especially of the draughts so caused, and think some special rule ought to be provided. If section three of the Factory Act of 1878 provides for ventilation, some words should be inserted in special rules to draw attention to it.

Rule 5. *Provision of brooms, &c., for sweeping, and occupiers to see that is done.*—Workmen agree to rule, but would like the sweeping of floors, &c., to be done after work has ceased. If employers were compelled to employ men to do it at night, the operatives would be willing for the cost to be deducted from their wages. If this would be an infringement of the Truck Act it could not, of course, be enforced, and in that case they would agree to a rule that the workers shall engage and pay an adult male to sweep the shop at night. This could be added to Rule 12 (now 13).

RULE 6. *Provision of washing conveniences.*—Agreed to.

RULE 7. *Temperature of workshops and of kilns at time of drawing.*—*Mr. Owen* says at one hollow-ware presser's shop he went to the heat was 130° Fahr., and in pressers' shops it is often 100°. By the application of a proper system of fan ventilation the evil of excessive heat could be lessened, while the ware would be dried quicker, as a dry atmosphere has been proved to drive the moisture out of the ware quicker than when the air in shop and stove is charged with humidity. Besides, for men, women, and young persons to be constantly employed in shops that are unduly heated, adds an unnatural and unhealthy exhaustion to that which naturally follows from their labour, and as they often have to go out into the cold, the transition means colds and chills, which adds greatly to the potter's liability to diseases of the chest. Since the introduction of steam pipes for heating and drying purposes, potter's shops have become more unhealthy; the workers, therefore, ask for a rule that no workshop shall be heated to a greater degree than 70° Fahr. They especially insist on the fact that the stoves require better ventilation to prevent the heat getting into the shops. With reference to the heat of ovens, the witnesses complain that the ovenmen are compelled to draw the ware when the heat inside the oven is from 150° to 200° Fahr. To prevent this they urge that the rule as to the temperature of ovens not exceeding 115° when ware is drawn be retained. They pin their faith to Rule 7 as proposed, and lay great stress on it.

RULES 8 to 12 (now 9 to 13) generally agreed to. The witnesses stated that some potters' shops are *over-crowded*, and that although each worker may seem to have sufficient cubic space, yet it is not sufficient where the heat is so great. They are further of opinion that "towing," if done at all, should be done in separate shops; and that moulds should be stored in separate shops. They request that a rule should be made, that boards used in dipping houses should not be used in potters' shops until they have been properly cleansed; that neither men nor women should be allowed to work at narrow benches face to face with each other, and that exhaust steam pipes should be so fixed that steam does not enter the shops.

Lead.—On the question of processes in potteries which cause plumbism, *Mr. Edwards* said that the workmen do not wish to injure the employers, but think that there is a substitute that might be used for lead in glazes and colours. We ought to do all we can to lessen the evil effects of lead. There are two gentlemen in the district whose opinions are valuable, M. Arnoux and Mr. John Campbell. These gentlemen use fritted lead, and this is suitable to nearly all bodies of ware. Chemists and practical men say the solubility is much lessened by fritting. If glaze in which all the lead has been fritted answers the purpose, the operatives think manufacturers ought to be made to use it. He produces specimens of ware and tiles, glazed with glaze in which all the lead has been fritted, many of them coloured, and some of them majolica. Produces a testimonial from R. Hammersley and Son, that "fritted glaze is as consistent with practical potting as using the lead in a raw state." The workers ask that tests should be made whether fritted lead is injurious or not, and then, that manufacturers should be asked to test whether it is practicable. The fritted glaze is an easier flux than raw lead. They propose that no raw lead shall be used in the composition of any glaze for earthenware or china. They ask that employers and operatives and practical chemists should make an inquiry, and report as to this. *Mr. Owen* added that the conservatism of potters is based on ignorance. The workmen have no proof that fritted lead is non-poisonous, but believe it to be so. Asks for a reply whether the Committee have power to test the fritted lead, as, if not, the operatives' association will memorialise the Home Secretary to give that power.

(For further evidence by these witnesses on this subject, *see* Fifth Day, June 2.)

The 11 workmen who were present—one of them a flat presser who had suffered from excessive heat of shop; another, a man who had suffered

from draughts; others from lead poisoning, &c.—were interviewed by members of the Committee separately.

In the afternoon, M. Arnoux, of Minton's, Limited, attended, and gave the Committee the following information as to the use of lead:—

For 30 years he has been managing a department of Minton's works, and has not used *raw* lead. In his opinion fritted lead can be used universally without injury to the trade; it does better for colours, and increases the brilliancy of the ware. For glazing insulators at a Burslem pottery no *raw* lead is used, although there is 60 per cent. of lead in the glaze. In most potteries there is a variety of bodies in the articles made, but the same glaze would do whatever the variety of the biscuit. Fritted glaze has less tendency to craze than glaze to which raw lead has been added; it is possibly a little dearer, as a little is lost in fritting, and there is additional expense at the frit kiln, but the difference in cost would be very little. His opinion is that fritted lead is insoluble; if nitric acid is added it has no effect. He never knew of a single case of lead poisoning in the part of Minton's works, where all the lead is fritted. Ground-laying colours and majolica colours can be fritted, although they contain a higher per-centage of lead than glaze. There would be less danger with red lead than with white, and it suits some colours better. It is not so soluble as white. Thinks sulphate of lead could not be used, it is objectionable in glaze and colours; it may be used in glass, but would not do for earthenware. Instead of adding raw lead to glaze, potters should use, for softening, a flux containing a good deal of lead, but all of it fritted. He insists on it that fritted glaze is better for coloured and printed ware, as well as for white ware. Colours used in a glaze which has been fritted are not altered. Even the turquoise blue over glaze is fritted, and the colour is not affected. Red lead cannot be fritted.

Mr. Laurie and Mr. Walmsley visited potteries in Hanley.

May 31st, 1893. Third Day.

Meeting at North Stafford Hotel, Stoke-on-Trent.
Present: all the members of the Committee.
Capt. May in the chair.

The following manufacturers attended, having been deputed to do so by a Joint Committee of the Chamber of Commerce and Manufacturers' Association.

Mr. R. W. Young, Mr. F. C. Moore, Mr. John Ridgway, } Representing the Staffordshire Potteries' Manufacturers' Association.
Mr. F. Rawdon Smith, representing encaustic tile manufacturers.
Mr. J. B. Shelley, representing china manufacturers.
Mr. S. W. Dean, representing glazed brick manufacturers.
As to the proposed special rules:—

Rule 1. *Child under 14 not to work in processes where lead is used.*—Agreed to.

Rule 2. *Occupiers to provide overalls and head coverings for workers in processes where lead is used.*—Manufacturers consider it desirable for the workers in the places and processes specified to wear overalls and head coverings, but consider that the operatives should themselves provide these articles. Dippers, for instance, get an extra wage, and have been accustomed to provide their own aprons, &c. Manufacturers would be willing to accept a rule that they should not employ a person who did not wear the overalls and head coverings, but that then it should apply to women and young persons only.

Rule 3. *Prohibition as to taking meals in certain shops.*—Agreed to, but will be difficult to enforce, and witnesses think that a notice affixed prohibiting the taking of meals should absolve the employer from further liability.

Rule 4. *Mechanical means to be adopted for the removal of dust in towing and china scouring, and efficient means to prevent dust inhalation generally.*—Manufacturers do not object to being compelled to provide fans for towing,

as steam power is already in use, but it is thoroughly impracticable to ask small manufacturers to put in mechanical fans for china scouring. With reference to future manufactories, or new additions to present factories, they see no objection to a rule requiring fans to be put in to take away the flint dust from china scourers. But in present china works, where there is, as a rule, no power, fans are impracticable. A great deal of power is required to drive a fan. The cost of a gas engine and fan would be at least 30*l*. Mr. Shelley says it cost 300*l*. to put in the engine and fans at his works, but then his works were fitted for it, and he has no doubt it will pay in the end. (*See also* notes of visit to Mr. Shelley's works on June 1.) As to the latter part of the rules, the manufacturers request that the "dusty processes" shall be defined. For instance, a turning shop is not a dusty place, and turning is not a dusty process. The cuttings from the turning lathes are moist, but if allowed to accumulate will soon dry and then cause dust. As a rule, turners are required to take away the dried cuttings at frequent intervals. Fans would do more harm than good in a hollow-ware presser's shop, by causing the dust to be raised from the floor. Potters' shops will never be free from dust. In tile-making the whole process is "dust"; they use dust for making tiles.

Rule 5. *Provision of brooms, &c. and sweeping of shops.*—Agreed to, but suggest that if workmen's ideas as to sweeping at night are adopted, the person selected should be approved by the masters.

Rule 6. *Provision of washing conveniences, &c.*—Approved, but manufacturers object to being compelled to provide the soap, nail brushes, and towels, as experience proves that these articles are stolen as fast as they are provided. Asked whether they could not prosecute the thieves, they replied "You must first catch them."

Rule 7. *Temperature of workshops not more than 75° and of kilns at time of drawing not more than* 115°.—Manufacturers consider this rule most objectionable; it is difficult to gauge whether the temperature in summer is due to artificial means or to natural means. In the case of flat pressers, if they do not have a great heat in the stove they cannot get their work off. Mr. Young spent hundreds of pounds before he could get enough heat. Cannot prevent the heat coming out into the shops. The present stoves are a great improvement over the old stove-pots. Such a rule would very often prevent the workmen from working at all. The maximum proposed, viz., 75° F., cannot be maintained, and the rule could not be enforced.

Ventilation is the only mode of reducing the temperature, but if you over-ventilate the stove you get a chance of reducing the heat of the stove so that the ware would not dry, and of the shop so that the workers could not work.

As to the second part of the proposed rule, Mr. Young states that the temperature of an oven at time of drawing is nothing like 115°. The hottest temperature of 24 ovens, taken specially for this inquiry, was 82° F. These temperatures were taken directly the ovens were ready to draw. But it would not matter to him if such a rule were enforced; he only thinks it unnecessary and absurd. Adult men are able to take care of themselves. If they say an oven is too hot, who is to decide?—To the best of his knowledge, no oven is ever drawn at a higher temperature than 90° F. It is to the interest of the manufacturer not to draw an oven when it is too hot, as to do so would crack the ware. Mr. Moore took the temperatures of various ovens at his works, and found the average to be: biscuit, 77°; glost, 88°; or half-way down, 76°.

Rules 8 to 12 (now 9 to 13).—Generally agreed to.

Lead.—The witnesses stated that in their opinion it was quite premature to state anything about fritted lead; we cannot yet go into the question. Mr. Ridgway's experiments with fritted glaze turned out most unsatisfactory, the colours shifted, and rendered the ware useless. To compel the use of fritted glaze would cause a revolution in trade, and at one fell swoop the whole trade would be paralysed. What suits one man's ware does not suit another's. If, as is likely, crazing of ware should

result from its use, our trade would be lost. To follow German examples would bring us down to German levels.

Mr. Young does not use more than 20 per cent. of lead in the glaze, and others not more than 25 per cent. If all of it were fritted, it is probable that when the ware got to America, it would craze, and we should lose all our trade. The adaptation of glaze to colours is a matter of experiment, and many manufacturers are making such experiments. In his own experiments so far, the result was that the glaze did not *cover* the ware.

Mr. Rawdon Smith, a tile manufacturer, uses fritted glaze almost universally, because he believes it to be insoluble; cannot say whether it would do for china and earthenware. It answers very well for tiles. The witnesses generally say it would take at least 12 months to test the matter of crazing. Chemical tests would not do. It would not be reasonable to give a manufacturer a choice of using fritted lead or of being subjected to extra restrictions if he used raw lead. They raised strong objections to a proposal that young persons under 18 or under 16 should be prohibited in "dipping." It is necessary to have a proper proportion of men and apprentices in the dipping house. (On the lead question, see also letters from manufacturers in Appendices E., F., G.)

In the afternoon, Mr. Ask and Mr. Gater, managers at Mr. Alfred Meakin's pottery, Tunstall, attended to give evidence on the heat of ovens at time of drawing. They said that 115° F. is not exceeded on the second or middle stage, but at the top it may be 130°, or in summer 145°, but it would only be the turn of each man once a fortnight to work at the top. This morning (May 31st) the top registered 130°, middle 110°, bottom stage 80°. The temperature of the biscuit ovens after two days' cooling is about 110°, and of glost ovens after 24 hours' cooling 115°. Mr. Meakin draws eight ovens a week, and never had a case of fainting or illness. His ovens cool more rapidly than in general, owing to better arrangements. If the temperature were reduced it would stop the output. There are no sulphur or other fumes inside their ovens. The fires are always drawn out.

Mr. Meakin finds costumes for ware cleaners; the hands wash them themselves, but have not, so far, stolen or illused them.

Mr. George Leason, managing director of Minton's, Limited, attended at request of the Committee, and said that it would be advantageous to the manufacturers to frit all the lead in the glaze before use. When he found that M. Arnoux was using fritted lead for majolica and ornamental ware, and that there had not been a case of lead poisoning in his department, he turned his attention to the matter Lead must be used in some form or other, and the disadvantages of fritted lead are that it takes 5 per cent. more lead, and it wears away the frit kiln. When lead is fritted together with the other constituents of the glaze, and all ground together, the glaze is of the same consistency throughout. He has used a fritted glaze for wall tiles for 12 years, and for the last eight months has used a similar glaze for china and earthenware. The ware is more brilliant. He has tested it at his own house by giving it constant rough usage, and no piece has yet crazed. The use of fritted lead enables them to do with fewer glazes; earthenware glazes reduced from six to two, and eventually to one. Does not think a rule prohibiting the use of raw lead would injure any manufacturer.

June 1st, 1893. Fourth Day.

Meeting at North Stafford Hotel, Stoke.
Present: all members of the Committee.
Capt. S. W. May, R.N., in the chair.

Secretary read letter from Mr. W. Owen, asking that operatives might give further evidence as to glazes. Also one from Messrs. J. Wedgwood and Sons (*see* Appendix G.) and other communications.

At 10.15, the Committee started for Hanley, where they visited a large pottery. In the flat pressers' shops the temperature was found to range from 76° to 80°, and inside the stoves from 91° to 100°. The boys have to enter a part of some of the steam-heated stoves here, to utilise a part in centre not reached by the revolving shelves. The temperature

in the open air on this day was 60°. In the towing shop a Blackman fan was working, and found to be very effective for carrying away the dust. The towing is done in a shop by itself, but there is no more dust than in a potter's shop. It takes a 6 horse-power engine to drive fan for eight towers. In the dipping house, the dippers and their assistants were examined. Boys of 15 were cleaning ware after the dipper, and it appeared to the Committee that this process might be done on a bench provided with a fan for taking away the dust. The dipping house is a lofty, well-ventilated building. The Committee then drove to Tunstall, where they went through all the departments of Mr. W. H. Turner's pottery, and saw his system of fan ventilation in practical application to towing, flatpressing, dipping, ware cleaning, &c. It appeared to be very effective, but on too elaborate a scale for ordinary use. It is applied for ventilation as well as extraction of dust. The plan is to carry away foul air at the point where it originates before allowing it to expand, and to carry away the dust before it rises. For this purpose exhaust fans are provided to carry away the foul air or dust, and also blow pipes or a blast to blow them away. (*See* Appendix H.) At another pottery in Tunstall visited by the Committee, the heat in the flat-pressers' shops was from 70° to 80°. The *stove* in the worst constructed shop is ventilated by a Blackman fan, with the result that the temperature of the shop is reduced 15° or 20°. The fan is hardly large enough for the space it acts upon, but even as it is, if it were not working the manager said the heat in the *shop* would go up from 80° to 95° or 100°. Boys do not enter the stoves here. The "towing" in one of the shops is done in the same room as the pressing, but all the towing tables are connected with exhaust pipes in which a fan is driven. The towing did not appear to be objectionable to the pressers, in fact, it is a question whether owing to the fans being constantly at work, it does not help to ventilate the shop. In another towing shop provided expressly for that process, a number of girls were at work, and all the dust was being carried away by a fan. The girls' hair and clothes were free from dust.

In the afternoon the Committee visited the china factory of Messrs. Wileman & Co. at the Foley, Fenton. The proprietor (Mr. J. B. Shelley) has recently put in a gas engine and fan for china scouring. The same power works a fan for carrying away the flint dust in the sifting process, and is also used for gold grinding and to rotate the brushes used in scouring. The work of china scouring is done by about half the number of women formerly employed, and an economy effected which will recoup the cost of installation. So far as the women employed at scouring are concerned, the benefit appeared very great. The process of ground-laying and also that of casting were examined here.

The Committee then visited a china works at Longton, where the usual system of china scouring is carried on. Three scourers were at work, in front of an open window, and with the ware on a perforated bench. The shop was full of flint dust, although the dust was at the same time going out of the window in clouds. One of the women said, "she had worked —on and off—at china "scouring for nearly 30 years, but few were so tough as she is, and most of them were done up in one or two years." All the women appeared to suffer from a dry hacking cough. The Committee were informed by the inspectors that this dusty shop and the very dusty process were fair samples of china scouring as usually carried on. After the return to Stoke, Mr. Laurie visited other works, and received from the chemist specimens of fritted glazes, &c., and information as to the use of lead in glazes and colours generally.

Captain May had to leave Stoke this afternoon for Burnley in his own district.

Friday June 2, 1893. Fifth Day.

Meeting at North Stafford Hotel, Stoke.

Present: all members of the Committee, except Capt. MAY.

Dr. J. T. ARLIDGE, in the chair.

At 9 a.m. Mr. W. Owen and Mr. T. Edwards attended, at their own request, to give additional evidence as to glazes. They suggest that

Mr. Laurie should have some pieces of ware, and dip some in raw lead glaze, some in fritted glaze, and some in leadless glaze, and see which is most tenacious and covers the best. They maintain that leadless glaze is more "homogenous" to the bodies of the ware than a lead glaze. They admit that they now think that some lead is useful and probably necessary, and they would not now recommend the prohibition of lead, it would not be reasonable to do so without prolonged tests; but they would like the Committee to receive from manufacturers some specimens of glaze *without lead* and test them and report that they find them in actual use, also that members of chambers of commerce should attend some manufactory and see ware dipped in leadless glaze. They state that chemists are now supplying fritted lead (*i.e.*, glaze with a very large proportion of lead in it) for use to add to the frit instead of adding raw lead. They acknowledge that even if it is true that fritted lead is the best, and is non-poisonous, it would take the test of time to prove whether it is practicable.

The Committee then deliberated on the evidence already given; and decided to supplement it by asking Messrs. Alcock and Dawes and Johnson to attend at the adjourned inquiry, and give evidence as to how far the effect of lead shows itself upon women and children, and especially pregnant women and after confinement; how far the effect of dust inhalation has increased or diminished of late years, and whether women should be prohibited from working at dipping or from working at all in potteries for more than one or for two or three months after confinement. They also decided to ask Mr. Harrison, a colour maker, if he would favour them with his views as to the use of fritted lead in glaze and colours, not to ask him the composition of his colours, but his opinion as to how far majolica, ground-laying, and other colours are poisonous.

Dr. Arlidge and Mr. Spanton consented to make a joint report before the next meeting as to the medical part of the question, and Mr. Lauric a report from the chemist's point of view. Mr. Walmsley promised to take temperatures of shops, stoves, and ovens, and report.

The Committee then went through the special rules *seriatim*, and members made the following suggestions:—

1. That the age at which young persons should be engaged in dipping-house work should be raised to 16, and it was debated whether women should be prohibited. Query, make a distinction between places where fritted lead is used and those where raw lead.

2. That the following should be added: "and have the overalls, &c. "washed on the premises, and provide a place for ordinary clothes to be "put during working hours."

3. Query, add glost placing and ground-laying; also no food to be eaten except in an apartment specially provided for the purpose."

4. Will require remodelling.

5. Add "sweeping to be done daily after work has ceased."

6. Washing conveniences to be placed near the places of work.

7. Remodel rule to provide for summer temperature. Query, should not boys be prohibited from going into steam heated stoves?

8 to 12. Generally agreed to.

The following further questions were raised: No evidence that oven men do suffer from excessive heat?

Structural arrangements. Whether some one should not have power to condemn a pottery as insanitary or unfit for work?

Whether ground-laying should not be done in a shop by itself? Proposed special rule: "No noxious process should be carried on in the same shop as any other process.

Should there be a rule to prevent girls under 16 from working at potters' lathes, query also, wedging clay?

The secretary was requested to get copies of the regulations in force in foreign countries, especially in Germany.

Also to send to each member a summary of proceedings of the Committee up to the present.

The Committee adjourned until Wednesday, June 28th.

During the interval, the secretary received communications from Mr. Alcock and Mr. Harrison offering to give evidence on June 28; from sanitary engineers mentioned in Appendix I., as to ventilating and drying apparatus; from Her Majesty's Chief Inspector of Factories enclosing letter from secretary of Operative Potters' Association, Scotland, asking to be included in the inquiry, and a further letter from the Association to say that as the special rules would apply to Scotland, they were satisfied; from Mr. Piercy, of Fenton, as to heat of ovens (*see* Appendix D.), from Mr. E. Dunn, suggesting that enamel and hardening-on-kilns in potteries should be closed each day at 1 p.m., and from Mr. J. Gratton, a pamphlet on smoke prevention.

June 28, 1893. Sixth Day.

Meeting at North Stafford Hotel, Stoke-on-Trent.

Present: all the members of the Committee.

Capt. S. W. May, R.N., in the chair.

Mr. T. W. Harrison, colour maker, Hanley, and *Mr. Harrison, Jr.*, potter's chemist, Hanley, attended, and the former, in reply to questions, said:—

The proportion in which *raw* white lead enters into glazes varies considerably; in white glaze from 15 per cent. to 30 per cent. Good glaze should not contain more than 15 per cent. of raw lead. In yellow or "cane" wares about 30 per cent. is used, in a soft glaze for common "Rockingham" teapots as much as 40 per cent. For practical purposes nearly all the lead is used *raw*. Vinegar or soda will set free the lead in very soft glazes containing a large proportion of raw lead. These soft glazes are not only injurious to the pottery workers but also to the public. Majolica ware is covered with a coloured glaze, and in this the proportion of raw lead is from 25 per cent. to 40 per cent. by weight. Considers it more injurious to the workers than any other, and has known of more cases of lead poisoning amongst majolica paintresses than amongst any other workers.

In printing, painting, and enamel colours there is little free lead. In ground-laying colours also very little, in some none at all; the injury to the workers in this department is due more to the dust than to the lead. The small proportion of lead in these colours will generally be fused or fritted.

When the glazes are mixed and fritted, they do not usually contain lead, it is added afterwards in a raw state. Produces a piece of good "fritt," containing all the component parts of glaze except lead, this fritt is reduced to a glass. Very clear, almost transparent, but a glaze containing lead in the fritt would be almost as clear. The fritting causes a change in a physical state rather than a chemical, and the benefit of fritting is very largely due to the physical change. White lead or carbonate is flocculent, very fine indeed. Because of this sub-division it readily enters into the system. When mixed with something which makes glaze and then fritted and ground, it is not so fine and not so fully sub-divided as raw white lead, and then it is practically harmless. Such glaze is absolutely insoluble in water. If you add nitric or other acid it may be soluble, but it would require a strong solution of acid to dissolve it. It is true that fritts which contain a large proportion of alkali will dissolve in water, but ordinary glazes do not contain sufficient alkali.

As to the practicability of the use of fritted lead, he does not entertain any doubt, and produces specimens of ware dipped in a glaze in which all the lead has been fritted, also a plate half of which has been dipped in a fritted glaze and the other half in a raw lead glaze, and there is no appreciable difference. In his opinion, fritted glaze has no greater liability to craze than raw lead glaze, and it is as durable; it can also be used with any "body" made, and with satisfactory results.

Fritted lead is practicable for majolica and other colours, but it would be more costly, and it wears out the fritt kiln very fast. As a manufacturer of glazes, he would not be afraid of a law prohibiting the sale of glaze containing raw lead.

As to colours, if limited to innocuous articles, the trade could not be carried on; chromate of lead, copper, antimony, tin, and arsenic to a limited extent are used. Red lead or white lead are both so poisonous, that one cannot be recommended in preference to the other. Never used sulphate of lead, and does not believe it would answer, as sulphur in any form is the greatest enemy a potter could have.

As to the substitution of other and innocuous materials, he does not believe that barytes or borax or any other substance will do in place of lead. Has made a leadless glaze, but it is not so good. On the Continent where glaze without lead is used, it is on a hard semi-porcelain body. The temperature required to fire it would be destructive to English ware.

To prohibit the use of lead, would be highly detrimental to the trade, in fact would ruin it. Manufacturers ought not to be called upon at once to use fritted lead, it would take a long time to make experiments. Legislation might be adopted that after a certain date—one or two years—free lead should not be used. Whatever action is adopted should be tentative and gradual. The day is not far distant when raw lead should not be used.

The use of fritted lead would probably cost a little more, but would be of great benefit to the workpeople. It would lessen the risk of lead poisoning but might be more injurious from the point of view of dust, as the particles of dust of fritted glaze are sharp and have a jagged edge. After all, the main difficulty is with the men and women and young persons in handling the glaze. Some years ago he had several cases of lead poisoning, which he found to be due to the carelessness of the men in mixing and using the glaze. He built a mess-room, bath-room, lavatory, and adopted stringent regulations as to cleanliness of person and clothing, and not eating in the workrooms. Since then has had no illness. A great deal depends on the workers, and their use of the appliances supplied.

Mr. J. Alcock, certifying surgeon, Burslem, attended and informed the Committee that he has had very few patients suffering from lead poisoning. Has made inquiries in manufactories, and examined a large number of persons working in the various processes in which lead is used, and is surprised to find how few persons suffer. He found a few with symptoms of lead poisoning, especially amongst ware cleaners. At a majolica works in Burslem they use fritted glaze or colour, and the health of the workers is good. Their ages range from 15 to 31, and they have worked at that pottery from one to 17 years.

Is of opinion that the examination of young persons and children by the certifying surgeon should be periodical and not merely when they first go to work, and that there would be no practical difficulty in carrying out a periodical examination of all the hands working in a pottery, except that of expense.

As to dust inhalation, he finds the women who work in towing shops anæmic, but thinks that the heat is more prejudicial than the dust. He believes that potters' asthma and bronchitis have decreased of late years. Is of opinion that a month is quite long enough for a woman to be absent from work after confinement, and that girls under 16 should be prohibited from working at potters' lathes, although he has not any patients suffering from that cause.

The Committee then deliberated as to future proceedings, and the secretary gave an account of what he had done since the meeting on June 2, and read the letters he had received.

Mr. Laurie visited a pottery, and consulted with the chemist as to the results of various tests of glazes and colours.

June 29, 1893. Seventh Day.

Meeting at North Stafford Hotel, Stoke.

Present: all members of the Committee.

Capt. May in the chair.

Letters from Mr. Dawes, Medical Officer of Health, Longton, and from Birmingham and Wolverhampton manufacturers of enamelled sign plates, read.

Joint report from Dr. Arlidge and Mr. Spanton read, and fully considered clause by clause, ordered to be inserted in report.

Mr. Walmsley produced table of the temperature of shops and stoves he had visited, showing that with an outside temperature of 65° to 74°, the shops were from 72° to 82°, and the stoves 80° to 98°, mostly flat pressers and hollow-ware pressers.

Mr. Laurie made a report as to the tests of, and experiments with, glazes and colours, which he had made during the interval, and it was ordered to be inserted in the report.

The special rules were then considered and amended and left over for final revision as they appear in the report.

June 30, 1893. Eighth Day.

Meeting at North Stafford Hotel, Stoke.

Capt. May in the chair.

The Committee considered and debated upon numerous proposals that had been brought before them, amongst others—

"That the certifying surgeon or a medical man should be empowered to inspect periodically all the workers in lead and dust processes"; and decided to recommend such a course, but not as a special rule.

"That females under 16 should be prohibited from working at the treading of lathes for turners"; and a special rule to this effect was carried by three to two, Mr. Walmsley not voting.

A very long discussion ensued on a proposal "that a special rule should "be made requiring occupiers to arrange for a weekly or monthly visit "by a doctor who shall examine every worker employed in the processes "referred to in Rule 1." The Committee were divided in opinion, the non-official members being in favour, the official members against. The proposal was therefore lost, but is included in the recommendation given above.

"That the process of ground-laying shall not be carried on in the same shop as any other process." Agreed to as a recommendation, but not as a rule.

Rule 7 was again under consideration, and it was suggested whether it would not be better to do away with it, and wait until further tests of temperature could be made, when the rule could be made more definite and precise, and it was decided to retain the rule, to introduce the principle, and to try its effect as it stands before making it more stringent.

July 1, 1893. Ninth and Last Day.

Meeting at North Stafford Hotel, Stoke.

Present: all members of the Committee.

Capt. May in the chair.

Draft report considered and adopted. Special rules finally revised and adopted. Medical report and Mr. Lauries' report discussed again and adopted, and the secretary instructed to write out the report and appendices and send to each member for signature.

Wm. Dawkins Cramp,
Secretary to the Committee.

APPENDIX B.

Notes by Dr. J. T. Arlidge, J.P., re Manufacture of Pottery.

Conditions of manufacture divisible into two groups—

1. Those found in external surroundings.
2. Those found in the processes pursued.

§ Concurrent and subordinate conditions are found in the age, sex, habits, and modes of work of workpeople.

I. *External surroundings.*—These are for the most part accidental and remediable. They are found in—

(*a.*) The construction and position of the workshops, and in their fittings.
(*b.*) In their cubic capacity and ventilation.
(*c.*) In the modes of heating and lighting.
(*d.*) In the observance of general cleanliness and in provisions made for the same.
(*e.*) In the drainage and cleanliness of yards, water-closets, &c.
(*f.*) In arrangements for taking meals.

II. *Processes pursued.*—These vary somewhat in earthenware and china making, nevertheless are reducible to three groups, according as they are concerned with—

(*a.*) The construction of ware from clay and flint.
(*b.*) The firing of ware and proceedings coupled with it, as glazing and placing.
(*c.*) The finishing of ware by decorating with colours, gold and otherwise.

To whichever group they belong these processes are injurious to health and life by—

1. The dust of clay;
2. ,, flint;
3. ,, plaster;
4. ,, glazes and colours; or by heat, and by gases evolved in firing; and
5. By mixed dust arising from kilns and ovens.

They are further chargeable with danger accompanying the filling and drawing of ovens, and where machinery is employed.

1. The dust of clay is especially evolved in the fettling and towing of ware, in the work of pressers and turners, and, in lesser degree, in throwing and handlemaking.
2. The dust of flint is especially raised in china scouring and placing.
3. The dust of plaster occurs in the work of modellers and mould makers.
4. The dust of glazes and colours owes its evils to the presence of lead, and affects dippers and their assistants, the mixers and grinders of glazes and colours, ground layers, glost placers, and those engaged in majolica painting.
5. Heat and mixed gases and vapours attend the business of firing and oven work.
6. Mixed dust arises in connexion with the work of drawing ovens, and consists chiefly of coal and flint dust.

§ Concurrent conditions influencing the results of work in potteries are found in the age, sex, habits, and modes of working of artisans.

In general, the ill consequences of the manufacture of pottery are more pronounced in women and children, in workpeople who are intemperate and dissipated, who neglect cleanliness in person and work, and wear unsuitable or insufficient clothing, or who recklessly expose themselves to the cold and wet, and to the baneful circumstances of their calling.

Again, injurious factors obtain in the position maintained when at work, and in the movements necessary to the carrying on of work.

In regard to the presence of lead and its consequences it is desirable to ascertain—

a. The proportion in which it enters into the composition of glazes and colours.

b. The chemical and physical state in which it exists in those compounds, and the possible changes in its physiological properties it undergoes in fritted glaze.

c. The question of solubility of fritted glaze, and of the reactions upon it by agents with which it is mixed.

d. The use of fritted glaze in colours for ground-laying.

e. The relatively poisonous property of red and of white lead.

f. The substitution of other and innocuous materials in place of lead.

Sex, age, and constitutional peculiarities exert manifest influence upon the liability to suffer from lead.

Children are more subject to the effects of *lead* than are adults. The same is true of women; and apart from the influence of sex, women are less fitted for employment in dipping houses, and where lead dust is thrown off, by reason of their loose dresses, the materials employed for them, and their long hair.

APPENDIX C.

Dear Sir, Longton, June 28th, 1893.

In reply to yours of the 5th ultimo, which I regret not having answered earlier, I beg to say I have been compelled to defer the reply, in the first place because I have no statistics, and, for a considerable number of years, no personal acquaintance with the class of workpeople about which you wish information, consequently I can only speak from remarks on the subject gathered from others from time to time; in the second place I had hoped to be able to attend your meeting and yet I could not possibly decide whether I could do so until close on the day. I now find myself unable to attend it.

I have already said I have no statistics, so must answer your various important questions by quoting the experience of men, young in practice, but coming more in contact with such cases, and comparing their experiences of this day with my own of years ago.

Children 11 to 13 years are occasionally victims to lead and colour poisoning; they should not be allowed to work at either, they are too young and thoughtless to avail themselves of precautions.

Young persons, females chiefly, 13 to 18, are often poisoned, especially those working in oil and dust.

Women are very frequently afflicted from the same cause.

I think it must be highly objectionable, both on the mothers' and infants' account, for pregnant women to work in lead or some colours, the bad results are too frequent. Women, after confinement, cannot resume such work without injury to themselves and their offspring. As all who are thus employed suffer more or less, and in the case of females the bad consequences being more directly conveyed to their offspring, I am of opinion that females should *not* be allowed to engage in such employments. I believe that the ill-effects of dust inhalation have diminished of late years.

Women should be prohibited from working in potteries for a longer period than one month after confinement, six weeks should be the minimum; a great many require at the least two months.

Girls under 16 should not be allowed to work at potters' lathes. I believe that lead colic and potters' paralysis are not nearly as common as they were some years ago.

Abortion and premature births are not uncommon in women poisoned by lead or dust colours.

I am sorry not to be able to assist more amply in this very important inquiry. It is a question pregnant with important consequences to the people of this district. The vigour or decline of a great portion of the present rising and future generations depend upon the inquiry leading to satisfactory legislation on the subject.

I remain, &c.
(Signed) W. J. Dawes,
M. O. H.

Wm. Dawkins Cramp, Esq.,
Her Majesty's Superintending Inspector of Factories.

APPENDIX D.

TEMPERATURE of POTTERS' WORKSHOPS and STOVES, taken by Mr. J. H. WALMSLEY, June 1893.

Out of Doors.	Shop.	Stove.	Heated by.	
Degrees.	Degrees.	Degrees.		
70	72	98	Steam - - -	Flat pressers.
—	75	92	„ - -	„
70	78	84	„ - - -	Hollow pressers.
74	80	90	Fire - - -	Flat pressers.
74	78 and 82	84	„ - - -	„
65	70	—	Steam - - -	Hollow pressers.
70	80	88	„ - - -	„
70	80	—	„ - - -	Flat pressers.
—	72	80	„ - -	Hollow pressers.
—	80	—	„ - - -	Flat pressers.
—	80	96	Fire - - -	Hollow pressers.
— (dull.)	70	—	Steam - - -	„
— (dull.)	72	—	„ - - -	„
68	74	—	„ - -	„
68	76	—	„ - - -	„
—	75	—	Fire - - -	Flat pressers.
—	72	—	„ - - -	Hollow pressers.
70	80	94	Steam - - -	Flat pressers.

OVENS.

One oven apparently over 150, fire drawn at 5 a.m., half emptied at 1 o'clock.

			Degrees.
1 biscuit oven nearly empty		-	90
1	„ half „	-	100
1	„ nearly „	-	88

From Mr. W. E. PIERCY, Fenton Potteries, June 2, 1893.

In accordance with my promise to you I have carefully registered with thermometer the ovens we have drawn since Monday last. You can take the register herewith sent as a fair average of both our biscuit and glost ovens. Of course they would vary slightly according to the atmospheric temperature, but as we always give the same time to each oven to cool, they could vary very little. Our ovens are so arranged that we can get two or three currents of air to play on the ovens, and can cool them down in as short space of time as would be safe to the contents.

Biscuit oven drawn 30th May, registered at 10 a.m., centre 96 degrees, back 101 degrees. This oven was fired up on Friday, 26th May, and was cooling three nights and two days with clammings down.

Glost oven (large) drawn 31st May, registered at 10 a.m., centre 110 degrees, back 124 degrees. This oven was fired up at 2 p.m. on Monday 30th, and was cooling two nights and 1½ days with clammings down.

APPENDIX E.

Extracts from Letters from Two German Manufacturers of Pottery as to the Law in Germany.

1. In reality there is no special law in Germany (known by us) about glazes on earthenware and about dust, but there is a general prescription in the *general-ordnung*, which is like a law, prescribing that everything injurious for the health of the workman must be avoided.

In reality I have for the last two years made all mechanical installations necessary for taking dust out of our rooms, and I am very satisfied with the result.

With regard to raw lead, I have reduced the proportion as much as possible by using more borax or boracic acid.

The lead is added to the frit in the frit kiln, and in some few cases the white lead is put into the mill in a per-centage which will not exceed 10 per cent.

2. There is no law in this country that compels manufacturers not to use more than a limited percentage of raw white lead in glaze.

There are laws that compel manufacturers to ventilate the rooms in a sufficient manner, and that compel them to build the workshops a certain height.

All men or women that work in the lead have to take their meals in rooms away from the workshops, and we have to provide extra washing stands and clothing and soap for them.

But the worst of all is that we have a law in our country that makes you responsible for any damage done in that way to a workman, whether it is the direct fault of the manufacturer or not, this law goes a long way. I had to pay a dipper that was affected by the lead and lost the use of his eyes.

We used to use our raw white lead in the glaze, but after the experience we had, we now frit it all.

APPENDIX F.

Extracts from Letters from Two English Manufacturers of Enamelled Iron Plates as to the "Fritting" of Lead.

1. You are perfectly right in stating that in enamel works like ours the lead is vitrified, and that no raw lead is added after the fusing with the exception of one colour, for which there is very little demand.

There is not the slightest doubt that the lead is far less dangerous to the workpeople when vitrified. Nevertheless it is then dangerous, and all enamel makers have to contend with illness through lead poisoning, although no free lead is used. The fact is the acids of the stomach do dissolve glass made from lead.

2. We beg to state that we incline to the opinion of the workpeople you mention, that if the oxide of lead contained in the glaze is fritted before being ground for use, that the danger of lead poisoning is greatly minimised, if not entirely avoided.

We always use oxide of lead vitrified (fused into a glass), and do not add any raw lead when grinding.

If I may venture upon a suggestion regarding the grave subject you are inquiring into, it is that a chemical expert of the highest standing should decide this question of "fritted" lead by actual experiments, say, for instance, he takes flint glass and decides if lead poisoning can be communicated from it, and if, as we believe, it cannot be, add larger proportions of lead to the glass until a point of danger is reached.

A restrictive rule regarding the proportion of lead that may be safely used, would not injure any interest, and would clear up the present uncertainties on the part of both employers and employed.

APPENDIX G.

Extracts from Letters from Manufacturers of China and Earthenware.

From Messrs. J. Wedgwood & Co., Etruria, May 27, 1893.

Factory Act Inquiry.

We shall be much obliged, should the question of restriction of lead in glazes be raised at the above inquiry, if this letter could be brought to the notice of the Commissioners.

Any interference with the amount of free lead in glazes would mean the absolute closing of one branch of our manufacture, in which we have again and again tried to use fritted lead without success, and it would seriously cripple other branches.

From the Worcester Royal Porcelain Co., May 17, 1893.

Earthenware is not made in Worcester, only china and semi-porcelain and a vitreous stone ware, and the glazes for these bodies would not, we think, be suitable for earthenware.

The glaze used at our "Grainger works" in St. Martin's Place is especially prepared to suit the china and semi-porcelain made there, and is known in the trade as a "Barytes" glaze, we have not felt justified in introducing it for general use, as the results cannot be relied upon. We have experimented for years with glazes, but have not succeeded in dispensing with lead in its raw state; when fritted the character is so altered that we have failed to successfully work it.

From Messrs. T. C. Brown-Westhead, Moore & Co., Cauldon Place.

The use of Red and White Lead.

Our practical opinion in this matter is, that in the first place, the general use of lead should be somewhat modified, in that it should be used only in proper quantities to arrive at the real purposes for which it is required. We think that undue excess of lead, in many cases, in the common glazes, such as "Rockingham," raw majolica glazes, and the cheaper sanitary glazes, has done much to add to the troubles arising from lead disease.

To fix any exact per-centage of lead to be used would be to practically paralyse the pottery manufacturer's trade.

We would earnestly call your attention to the impossibility of any such action as has been suggested, viz., that a leadless glaze (*so-called*, as it is admitted a per-centage of lead in some cases has to be added) can be supplied to us by outsiders.

We have in use, perhaps, 20 different glazes, each one the result of great care and experience, and, of course, only suitable to our individual requirements; in proof of this, we may add that some of our colours and bodies date back over a century.

Our long experience of the district proves to us that to make pottery satisfactory requires a very close, personal, and daily acquaintance with its almost endless technicalities. We have, however, made many experiments of fritted lead, &c., which are certainly encouraging, and invite further effort. We are makers of tiles ourselves, but we do not see that a tile glaze, said to be innocuous, and giving satisfaction, is a criterion for glazes suitable to general pottery.

In conclusion, we would add, whilst some manufacturers appear with the best intentions prepared to carry out new systems, we think, in our candid opinion, that alterations in this important matter should not at first be widely made, but, as we have said, first modified and then by patient experiment carefully followed up, for time is the only true test; or, very probably, the best endeavours of the most charitably minded may result in an unforeseen change as to the enduring quality of the pottery, which would be almost unsurmountable, and give into the hands of foreign competitors the very thing which they could most desire.

From Mr. Cecil Wedgwood, Etruria.

Towing of flat is not carried on at our works, so of this process we cannot speak. China scouring is carried on, and here we have adopted a fan, which carries off the flint dust.

It would be impossible on our works and on many old works to apply the fan system to all shops where flat pressers, hollow-ware pressers, turners, ware cleaners, &c. are employed. Neither, in our opinion, is it necessary.

We have plenty of motive power, but it would be impossible to carry the requisite shafting through the different disconnected shops, and if it was insisted on would mean the closing or rebuilding of our works.

The dust in flat pressers, hollow-ware pressers, and turners' shops is not occasioned by the work itself, but is due to clay dried and trodden into dust; and proper care in sweeping the shop and sprinkling the floor with water, would seem to us more effective than a fan, which must draw all the dust off the floor past the mouths and nostrils of the work-people.

Potters work in plastic clay, so with due precautions as to cleaning the shops no injurious amount of dust ought to be created.

Lead poisoning.—We should be delighted if we could in any way minimise the danger connected with work in which lead compounds are used. We have tried the plan of "fritting" the entire glaze, but without success so far. We are now working at this question, but it is one of extreme difficulty. The glaze must suit the body of the ware, the colours of the pattern printed under the glaze, the colours and gold applied on the surface of the glaze. It is extraordinary what a slight change in composition will entail a large loss in defective ware.

One of the most damaging faults to a potter's credit, *i.e.*, "crazing," does often not appear until a year or so after the goods have left him, so that any experiments would have to be tried on a large scale over some years, and we are always very loathe to change our mixings on which our reputation of 130 years is built. Hence this question is one of extreme difficulty.

It is extremely difficult to enforce care on the dippers and others employed in the glaze. When asked for the nail brushes, soap, and towels provided by the masters for their use, they generally reply, "They are in the cupboard." It does not seem to occur to them to use them. Some constitutions are far more liable to suffer from lead than others. No dipper should go on after he has had the first signs that he is suffering from the lead.

He should then take to "placing" or some other branch to which he is fitted. But the good pay and short hours, which are intended to make up in a certain degree for the danger attending a "dipper's" work, act as an inducement for a man to go on at this trade when it is wiser he should stop.

Care in cleaning the hands and nails before eating, not eating in the workshops, properly dusting the smocks and taking them off before meals, are all necessary points to be attended to.

APPENDIX H.

From Mr. W. H. Turner, Alexandra Works, Tunstall, on his Ventilating Apparatus.

A long series of experiments with air and dust, commencing in 1877, has led to the discovery of an evenly balanced current of air which can be kept under control and regulated at any given point.

Taking the case of towers, whose duty it is to produce a highly polished surface on the plate in the clay state when it is perfectly dry.

This operation is usually performed by women, and consists in applying sand-paper to the plate whilst revolving, thus creating an amount

of fine dust which impregnates the atmosphere, and has such disastrous effects on their health.

To lessen the evils attending the inhalation of this impure air, extracting currents of air are caused by exhaust fans, which are placed to the best advantage.

The greatest portion of dust is conveyed into the lungs when the tower blows off with her mouth the finest particles of dust that the extracting current fails to lay hold of, as the average number of plates which the tower has to blow dust off with her mouth (in order to make good work) is about 600 (hundred) daily, it is easily conceived how this dust when at liberty settles on their dress, also the walls and ceiling of the workshop.

The introduction of an injected current of air in connexion with the extraction current so as to create an evenly balanced volume at any given point, is practically found most efficient.

This injected current is always assisting the "tower" in her work without the effects of draught; it keeps the clothing free from dust; all dust is immediately carried away from sand-papered or dusty ware or moulds before it can impregnate the air breathed by the operatives.

The room in which this evenly balanced volume of air is continually circulating can be rapidly released from dust caused by cleaning and sweeping or passing and repassing of the workpeople.

With the evenly balanced volume of air grasping and carrying off the dust at the point where it is created before it is permitted to expand, it is impossible for it to enter the eyes, ears, nose, or mouth of the operative.

China scouring, an operation usually performed by women, requires the dust collecting by means of evenly balanced current of air at the point where it is made without allowing it to expand, so that there is no necessity for any further protection, inasmuch as the head of the worker is always surrounded by pure air. The cost of perfecting this system, so that the saving would amply repay the manufacturer for his outlay in three years, has not yet been ascertained; there is no doubt that it can easily be accomplished.

Ware cleaning, usually performed by girls, is the levelling of the glaze when perfectly dried on the ware, by rubbing with the hands in a warm atmosphere; thus all the fine particles of lead are kept in suspension, and readily have access to the body, through the nose, eyes, and ears. Here, under the new conditions of ventilation in the form of an air curtain, it is practically proved that the poisonous dust cannot be inhaled, and the head is surrounded by pure air, without danger to children and young persons.

The process can be easily adapted to existing works, and without a large outlay, and will easily repay itself in the increased facility of manufacture.

There are no conditions under which poisonous gases cannot be controlled in all staple trades, so that the wearing of goggles and respirators can be dispensed with.

APPENDIX I.

Catalogues, Price Lists, &c., have been received from the following Ventilating and Sanitary Engineers.

Blackman Ventilating Co., Limited, 63, Fore Street, London.
Sturtevant Blower Co., 73, Queen Victoria Street, London.
Robert Boyle and Sons, 64, Holborn Viaduct, London.
Baird, Thompson, & Co., 159, Queen Victoria Street, London.

APPENDIX K.

Experiments on the Solubility of Fritts.

In my first report on fritts (page), I pointed out that the solubility of the lead in weak hydrochloric acid, depended both on the amount of lead present and on the amount of borax present in the fritt.

With a view to determining with such exactness as was possible, what were the limits within which borax and raw lead might be added to a fritt, I asked Mr. G. G. Leason, of Minton's, Limited, to prepare a set of experimental fritts containing varying quantities of borax and white lead, along with Cornish stone, sodium carbonate, flint, and whitening. These fritts, after being made, were ground in the usual fashion, and sent to me by Mr. Leason, ready for the dipping tub.

The following table shows the per-centage of borax and white lead contained in these fritts.

No. 1.

Per-centage of Borax and White Lead in Fritts.

Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Borax - - -	10	20	30	10	20	30	10	20	30	10	20	30	10	20	30
White lead - -	10	10	10	20	20	20	30	30	30	40	40	40	50	50	50

A gramme of each of these fritts was treated with ·38 per cent. hydrochloric acid for three hours at from 100°–110° F. At the same time some sulphate of lead was treated in the same way as a check experiment. The amount of sulphate of lead dissolved was ·9 per cent., being practically the same as the amount dissolved in the former experiments.

On estimating the amount of lead dissolved from each of these fritts, the conclusions of my previous report were confirmed in a remarkable manner, the amount of lead dissolved varying both with the amount of lead present in the fritt and the amount of borax present in the fritt.

These results are clearly shown in Table 2. Along the top of the table are placed the per-centages of raw lead in the fritt, and down the side of the table the per-centages of borax in the fritt. Consequently, in order to find any fritt mentioned in Table 1, it is only necessary to draw a line down Table 2, starting from the per-centage of raw lead it contains, and along Table 2, starting from the per-centage of borax it contains, to find the square corresponding to that fritt.

On looking at Table 2 it will be obvious at once that the amount of lead dissolved increases horizontally with the increase of the amount of lead present, and increases vertically with the amount of borax present. We may probably assume for the present, until further light is thrown upon this question by the medical authorities, that fritts in which less than 3 per cent. of the lead is dissolved are practically harmless. All such fritts have been printed in heavy type in Table 2.

No. 2.

Per-centages of Borax in Fritt.	Per-centages of Raw Lead in Fritt.				
	10	20	30	40	50
	Per-centages of Lead dissolved.				
10	·3	·5	2·8	5·0	12·0
20	·6	2·4	5·0	13·0	15·0
30	1·3	6·0	14·0	20·0	36·0

NOTE.—In the use of fritts in which the per-centage of lead and borax added together amount to 60 and upwards, some of the lead chloride formed separates slowly in working, and in the fritt containing 50 of lead and 30 of borax the acid is saturated.

On comparing these fritts one with another we find that we can sum up the results of the inquiry in a very simple rule, viz. :—

If the per-centage of raw lead and the per-centage of borax in a fritt do not amount, when added together, to more than 40, the fritt may be regarded as practically harmless ; but if the per-centage of lead and the per-centage of borax, when added together, amount to more than 40, the fritt is probably too soluble to be safely used.

It would be interesting to know whether manufacturers of fritts consider this limit practicable for ordinary glazes. It will be noticed at once that this rule would not include majolica fritts, and that therefore, while doubtless majolica fritts are far less dangerous to use than raw lead, it would be a great mistake to regard them as non-poisonous.

It would be a matter of some interest to know how far the fritts used in the enamel plate making, and which have proved dangerous to health, agree with the standard here laid down.

I need hardly say that I regard this standard merely in the light of a temporary working hypothesis, the ultimate justification of which must depend upon medical evidence.

It must further be understood that these results might possibly be modified in the case of any particular fritt by an alteration in the proportions of some of the other ingredients.

A. P. LAURIE.

The recommendations of the Committee, except such as were *ultra vires*, have been embodied in the following Special Rules :—

FACTORY AND WORKSHOP ACTS, 1878 TO 1891.

SPECIAL RULES.

THE MANUFACTURE OF EARTHENWARE AND CHINA.

Duties of Occupiers.

1. They shall provide suitable overalls and head coverings for all workers employed in the dipping house or dipper's drying room, or in

any processes of ware cleaning after the dipper, glost placing, china scouring, ground laying, or majolica painting, or in any process in which lead is used, and shall have the said articles washed on the premises, and shall also provide a place in which the workers can deposit clothing put off during working hours.

2. They shall not allow any persons (either adult males or others) to cook or partake of any food, or to remain during meal times in the dipping house, dipper's drying room, china-scouring room, glost placer's shop, ground-laying shop, or majolica-painting room.

3. They shall adopt efficient measures in the processes of towing of earthenware and of the scouring of china for the removal of all dust and flint by fans or other mechanical means; and in all dusty processes they shall adopt measures for dealing with avoidable dust, and for the prevention of any injurious effects arising therefrom, either by the use of mechanical fans or other efficient means.

4. They shall provide brooms, brushes, and all other necessaries for the daily sweeping of floors of workshops and of such stoves as are entered by the workers, and for the cleansing of work benches and of stairs leading to workshops; and shall arrange that the floors of such workshops and stoves are sprinkled and swept every working day, and the scraps and dirt removed, and that work benches and stairs are cleansed at least once a week. The daily sweeping of floors of potters' shops shall be done after work has ceased for the day, unless there is some sufficient reason to the contrary.

5. They shall provide washing conveniences with a sufficient supply of water, soap, nail brushes, and towels, for all workers employed in the places and processes referred to in Rule 1; and the washing apparatus shall be in convenient proximity to the work places.

6. They shall arrange that the temperature of potters' workshops outside the drying stoves, when people are working there, shall not exceed 80° F. if the outside temperature is below 70° F.; and when the temperature outside is above 70° F., the inside temperature shall not be more than 10° higher.

Duties of Persons Employed.

7. Every person to whom is supplied an overall suit or head covering shall wear the same when at the special work for which such are provided.

8. Every person employed in the places or processes enumerated in Rule 1 shall carefully clean and wash his or her hands and face before meals and before leaving the works.

9. Every person employed in dipping, carrying ware from the dipper, cleaning ware after it has been dipped, glost placing, china scouring ground laying, majolica painting, or in any process in which lead is used, shall during the meal times leave the shops in which those processes are carried on, and shall not cook or eat any food therein at any time.

10. The measures taken by the employers for the ventilation of the various work rooms and stoves and for the removal of dust, shall not be in any way interfered with by the workpeople without the knowledge and concurrence of the employer or manager of the works.

11. Every male or female worker shall be responsible for the cleansing of that portion of the room in which he or she is employed, and shall see that the floors of shops and of such stoves as are entered by the workers are sprinkled and swept, and the dust, scraps, ashes, and dirt removed every day, and that the work benches and stairs are cleansed at least once a week. The sweeping of floors of potters' shops shall be done after working hours, either by themselves (*i.e.*, the workers) or by

an adult male employed and paid by them and approved by the employer.

R. E. Sprague Oram,
H.M. Chief Inspector of Factories.

xxii.—*Open Quarries.*

Attention was drawn in my last annual report to dangers connected with quarries, and Mr. Richmond, who had devoted considerable attention to the subject, and was well acquainted with the rules in force at the best regulated quarries, prepared special rules for consideration. You were pleased to appoint a Committee of Experts and Inspectors of Factories and Mines, with Mr. Richmond as secretary. The Committee visited quarries in 22 counties in England, Wales, and Scotland, and after due enquiry from employers and employed, made the recommendations contained in the following report:—

Report of the Committee appointed to inquire into the Dangers of Life, Limb, and Health, attending Employment in Open Quarries.

To the Right Honourable Herbert Henry Asquith, Q.C., M.P., Her Majesty's Principal Secretary of State for the Home Department.

Sir, Home Office, November , 1893.

In compliance with your instructions we have conducted an inquiry into the conditions of labour at open quarries, with a view to diminishing any proved dangers to the life, limb, or health of the persons employed. In accordance with your desire, Dr. Le Neve Foster, with the assistance of two other gentlemen, will make an inquiry into the condition of the Merionethshire Slate Mines, and will report to you in due course.

I.—FIELD OF INQUIRY.

The field of the inquiry is very wide and varied, for it includes workings scattered about in almost every county of the kingdom, sometimes shallow pits employing only a few persons, at other times large excavations of great depth employing several hundreds. The following table is an abstract of the Census Returns of 1881 and 1891, which are given in detail in Appendix I., and shows the number of persons engaged in quarrying stone, limestone, and slate, in working clay, and in making bricks, plaster, and cement.

Persons Employed.

Division of the Kingdom.	1881.				
	Stone Quarrying, including Limestone.	Slate Quarries.	Clay-workers, including Brickmakers.	Plaster and Cement Manufacturers.	Total.
England - -	25,801	1,184	53,074	3,641	83,700
Wales - -	3,069	13,716	1,845	39	18,669
Scotland - -	7,308	762	3,328	58	11,456
Ireland - -	1,210	98	501	24	1,833
Total - -	37,388	15,760	58,748	3,762	115,658

Division of the Kingdom.	1891.				
	Stone Quarries, including Limestone.	Slate Quarries.	Clay-workers, including Brick-makers.	Plaster and Cement Manufacturers.	Total.
England - -	33,093	1,256	47,392	5,618	87,359
Wales - -	3,720	12,507	2,192	18	18,437
Scotland - -	9,327	799	4,126	82	14,334
Ireland - -	725	92	646	44	1,507
Total - -	46,865	14,654	54,356	5,762	121,637

In considering the above figures it is necessary to recollect that they include many persons employed in or about underground workings, which are legally mines, though usually spoken of as quarries. Such, for instance, are certain workings for building-stone in Somersetshire, flagstone in Lancashire and Yorkshire, and slate in Merionethshire. Consequently the totals in the table are higher than they would be if the Census Returns referred solely to excavations open to daylight. On the other hand it is quite possible that certain workers in quarries escaped mention under the proper head, owing to their having called themselves simply "labourers," without specifying the precise nature of their employment.

II.—PLACES VISITED.

In conducting our inquiries we have visited many important quarries worked for building-stone, road stone, slate, limestone, clay, gypsum, or ironstone in the following counties:—

England.

Cheshire.
Cornwall.
Derbyshire.
Devonshire.
Dorsetshire.
Durham.
Kent.
Leicestershire.
Nottinghamshire.
Shropshire.
Surrey.
Sussex.
Wiltshire.

Wales.

Anglesey.
Carnarvonshire.
Denbighshire.
Flintshire.
Glamorganshire.
Merionethshire.
Montgomeryshire.

Scotland.

Aberdeenshire.
Argyllshire.
Edinburgh.
Fifeshire.
Renfrewshire.

We have thus a general idea of the conditions under which quarrying is being carried on at the present time.

We here take the opportunity of acknowledging the great readiness displayed by the owners and managers of quarries in showing us their workings, and in affording us much valuable information.

III.—STATISTICS OF ACCIDENTS.

We have found the area of the inquiry so much larger than we anticipated, and the time at our disposal so limited, that we have not been able to lay before you recent statistics, showing the mortality from accidents among different classes of quarrymen, as we desired to do. The returns submitted in Appendix II., some of which are as complete as could be wished, show that great disparity exists in the death rates, some being much lower than those of mines, and some much higher. Many of the accidents are attributable to neglect or recklessness on the part of the workmen themselves. In order to obtain more accurate statistics in future, we recommend that the verdicts of coroners' juries and the returns of registrars should more fully describe both the nature of the occupations of the deceased persons, and the precise causes of their deaths. In this we are confirmed by the evidence of Dr. Ogle.

IV.—EVIDENCE TAKEN.

In addition to making personal investigations at quarries, we have taken formal evidence from owners, managers, doctors, and working quarrymen, and, as will be seen by referring to Appendix III., many important facts and suggestions were brought under our notice.

Dr. William Ogle, lately Superintendent of Statistics at the General Register Office, kindly gave us at some length, the result of his investigations into the mortality of quarrymen, both from accident and disease. His conclusions are somewhat surprising, for he shows that the quarrymen has more to fear from disease than from accident. In the first place he told us that the death-rate of slate and stone quarrymen, though higher than that of the average male person, is precisely the same as that of the medical man, and is lower than that of cabmen, bargemen, carters, law clerks, butchers, hair-dressers, book-binders, plumbers, glass-makers, and others. Secondly, he informed us that the mortality from accidents among quarrymen approximates to that of coal miners, and is almost the same as that of fishermen ; and further, that the quarryman's life is shortened in a remarkable degree by phthisis and other diseases of the respiratory organ.

The excessive death rate from these complaints is attributed by Dr. Ogle mainly to the inhalation of dust. Whatever be the cause, we are led to the conclusion that it is a most important duty to protect the quarryman against any influences which would tend to promote these diseases.

Considering the importance of the subject and the fact that Scotland and Ireland were not included in Dr. Ogle's figures, we think it highly desirable that further investigations should be made, based upon the death registers of recent years. If such an inquiry is agreed to, it will be desirable, for the particular object in hand, to compare the death rates of different counties, or convenient districts where a considerable number of persons are employed in quarrying ; and the value of the statistics will be increased if all persons are included, so as to institute a comparison between quarrying and other occupations, males and females, and persons living in quarry districts and the population of the United Kingdom generally.

V.—SPECIAL RULES.

After considering the evidence tendered to us, the notes of our visits to quarries, and the results of our previous experience, we have drawn up a code of special rules designed to prevent accidents and to mitigate their effects. In framing these rules we have made use, to some extent, of those proposed by Mr. Richmond, and of others already in force at certain quarries. The code has been devised so as to be applicable to all quarries, and is capable of being supplemented by further regulations suitable to any individual case.

We desire, specially, to point out that under the existing state of the law these rules cannot be enforced at quarries which, owing to the absence of machinery and to the fact that no women, young persons, or children, are employed, are neither "factories" nor "workshops." Various matters relating to the health and safety of the workpeople are not mentioned in the code of rules because they are already provided for by the Factory and Workshops Acts, such as prevention of dust, ventilation, provision of proper sanitary arrangements, and fencing of dangerous machinery.

SPECIAL RULES.

The following rules shall be observed, so far as is reasonably practicable, at all open quarries, that is to say, at any place not being a mine, in which persons work in getting clay, stone, coprolites, or other minerals.

1. Safety of Quarries.

a. The working of the sides, tops, or overburden of quarries shall be carried on so as to prevent dangerous falls.

b. The overburden or "tops" of quarries, and all loose ground or material shall be cleared far enough back from the edge of the quarries to prevent danger to the persons employed.

c. Where a quarry is worked in steps or "galleries," these shall be of sufficient breadth in comparison with their height to ensure safety as far as possible. When a quarry is worked in pits, sufficient support to the sides shall be left to ensure safety to those employed.

d. There shall be, as far as practicable, a clear space between the outside rails of tramways and the edges of galleries, sufficient to prevent both the falling of stones from the waggons and the falling of the men themselves to galleries below. Where such a space is impracticable the edges shall be securely fenced.

e. The top of every quarry, if dangerous, and the top of every shaft, shall be securely fenced.

f. All bridges shall, if dangerous, be securely fenced.

g. In addition to the accidents which have already to be reported under the Factory and Workshops Acts, 1878 and 1891, all accidents causing serious personal injury to any person employed in or about the quarry from any cause whatever shall be reported to the inspector and to the certifying surgeon of the district by the occupier or agent within 48 hours of their occurrence.

h. If work is carried on at night, it shall be under special supervision, and sufficient light shall be provided.

2. Blasting.

a. All explosives shall be conveyed from the magazine to the quarry, and kept till used in secure packages so made and closed as to prevent

any escape of the explosives and any danger from sparks. Every workman or gang of workmen possessing explosives unused, shall keep them in his or their own locked box provided for that purpose exclusively. The interior of the box shall be kept clean and free from grit. Detonators shall be kept in separate and suitable boxes. No person shall smoke while carrying, handling, or using explosives, or when in proximity of any person so doing.

b. No iron or steel rammer, pricker or charger, or scraper, shall be used for charging a hole with any explosive. Wooden rammers only shall be used for pushing in or ramming down explosives. No straw fuses shall be used. After firing a charge of any explosive, no further charge shall be introduced into the hole or into any rent made until after the lapse of twenty minutes.

c. Due warning shall be given by an efficient system of signals before blasting may be commenced, and when it is finished. In quarries where blasting occurs daily, it shall as far as possible take place only at fixed stated intervals. Where danger from blasting may arise to the public, efficient means shall be taken to give them due warning.

d. A sufficient number of proper shelters shall be provided (which must be used by the persons employed) except where all leave the quarry during blasting.

e. If a shot has apparently missed fire, no person shall be allowed to go near it until after the lapse of half an hour. The person or persons whose shot has apparently missed fire, shall immediately give warning of the same. A shot that has missed fire, shall not be unrammed, bored, or picked out.

f. Each quarry shall frame further regulations as to intervals and signals for blasting, copies of which shall be kept constantly affixed in the quarry office, and in a sufficient number of places in and adjacent to the quarry.

g. Copies of such other regulations concerning explosives and blasting as may be framed shall be posted up in the quarry office and the quarry.

3. Access to Quarries.

a. Secure means of access shall be provided by which workmen can go to and from their working places.

b. A ladder permanently used for the ascent and descent of persons in the quarry shall not be fixed in a vertical or overhanging position, and shall be inclined at the most convenient angle, and every such ladder shall have substantial platforms at intervals of not more than 10 yards.

c. All tunnels used as a regular means of access to working places shall be kept sufficiently lighted and drained, and where the space between the side of the waggon and the side of the tunnel is less than three feet, places of refuge shall be provided at intervals not exceeding 100 yards.

d. Persons shall not be raised or lowered in cages, tubs, buckets, or waggons unprovided with guides, except in sinking shafts.

e. Where machinery is used for raising or lowering persons, further regulations shall be made to suit the special circumstances of the case.

4. Machinery and Plant.

a. Each steam boiler, whether separate or one of a range, shall have attached to it a proper saftety valve and also a proper steam gauge and water guage, to show respectively the pressure of steam and the height of water in each boiler.

b. Every steam boiler shall be cleaned out and examined internally at least once in every twelve months, and a record of its condition shall be kept at the office of the quarry.

c. No person shall remain under the rope or chain of an aerial incline whilst a waggon or load is ascending. Whilst a load is being moved on the landing table no person shall remain immediately underneath it; and no person shall be allowed, without special permission from the manager or other official, to ascend or descend by means of an aerial incline.

d. The person or persons in charge of plant, machinery, or appliances shall daily inspect the same, and forthwith report any defects with a view to their being remedied. Once a month at least all plant, machinery or appliances shall be thoroughly examined, and a record of their condition shall be kept at the office of the quarry.

e. The rails on the tops of all inclines and on all landing tables shall be provided with proper stops.

f. Every crane shall be provided with an efficient catch.

g. The permanent ways shall be kept in an efficient state of repair.

5. Duties of Officials and Workmen.

a. It is the duty of all officials to see the provisions of the Acts and these special rules carried out.

b. An official or officials shall daily inspect every working place and travelling road and all adjacent places from which danger might arise, and should danger appear steps shall at once be taken to remove it. They shall satisfy themselves as to the safety of any rope and other appliances used by the workmen.

c. The proper official or officials shall record and report all dangers notified to them by the workmen.

d. It is the duty of all workmen to comply, so far as is reasonably practicable, with the provisions of the Acts and these special rules, and with such directions concerning safety and discipline as may be given to them by the officials.

e. Each workman working on the face of a rock, or standing on a narrow ledge, shall, when requisite, use a rope or other appliance, and every workman shall, before commencing work, satisfy himself as to the safety of any rope and other appliances in his personal use, and shall not use anything that he finds unsafe.

f. Each workman shall, before commencing work, and during the course of it, and especially after blasting, make a careful examination of his working place, and remove any loose rock, stones, or ground which might be dangerous.

g. No workman shall throw down rock, stones, ground, or other material, which might endanger other persons, without giving them warning and seeing that they have retired to a safe place.

h. Every workman who notices anything that appears unsafe, or likely to produce danger, shall forthwith report it to an official.

6. Ambulance.

At quarries where more than 25 persons are employed, ambulances or stretchers with splints or bandages shall be provided at convenient places ready for immediate use in case of accident.

VI.—FENCING OF QUARRIES AND SANITARY ARRANGEMENTS.

From our personal knowledge we are able to say that the Quarry (Fencing) Act, 1887 (50 & 51 Vict. cap. 19), is not duly enforced in many districts. Evidence has been given, and in some instances confirmed by our inspections, that sanitary arrangements are occasionally insufficient, or wanting, or likely to cause the pollution of streams. Powers already existing under present laws seem to be sufficient to deal with both these matters. We would suggest that the attention of the Local Government Board should be called to them.

VII.—RECOMMENDATIONS.

There are several matters which we should like to recommend to the consideration of quarry owners, in the hope that they will receive attention. We have no hesitation in making these recommendations, as we are simply pointing out arrangements which we have noticed at several well managed quarries.

They are as follows:—

(1.) Houses for Meals and Drying Clothes.

It is very desirable that the workmen should have their meals in comfort. In some cases they live close to the quarries and can go to their own homes, but often this is not possible. Where men have to walk long distances to their work and are exposed to much bad weather, it appears desirable that they should have means of drying their clothes. We therefore recommend that houses should be provided for taking meals and drying clothes.

(2.) Barracks.

Where men live in barracks belonging to the owner of a quarry care should be taken to enforce great cleanliness. Meals should not be taken in the sleeping apartments, and the practice of allowing two men to sleep in one bed should be prohibited.

(3.) Food.

Much evidence has been given to us about the food of quarrymen. We are of opinion that the Welsh quarryman might with advantage copy his brethren in Scotland and elsewhere, and make use of a more varied diet such as porridge and milk, broth with vegetables, &c., and be careful to avoid stewed tea, for we were struck by the fact that the physique of the Scotch and Cornish quarrymen was decidedly superior to that of the Welshmen.

The establishment of the classes for teaching plain cookery in quarry districts could not fail to prove advantageous to the workmen.

(4.) Instructions in Ambulance Work and Nursing; Hospitals, &c.

We have remarked with pleasure that some hospitals already exist, and that ambulance classes have been established in connexion with many quarries. We consider that further hospital accommodation is not only desirable but also much needed. We further recommend that instruction in ambulance work should be universal, and that while the husbands and sons are learning how to render first aid to the injured,

the wives and daughters should be taught nursing. Like cookery, this instruction might be provided under the Technical Education Act. When persons are exposed to special injury from any cause, special appliances should be used to protect them, such as spectacles, respirators, &c.

(5.) RECREATION.

It was satisfactory to learn at some quarries that the wants of the men and boys after working hours were not forgotten, and we are of opinion that the general wellbeing of the workpeople can undoubtedly be promoted by facilitating their means of recreation.

(6.) QUALIFICATION OF MANAGERS.

It is very difficult to lay down any hard and fast line for workings which vary so much in size and risk as quarries, but we advise that a person before becoming manager should have had practical experience in a quarry for at least two years.

FURTHER LEGISLATION.

Seeing that many quarries will escape the action of the proposed special rules for the reason given in Section V., we consider further legislation necessary in order to bring them under the law.

We are, Sir,
Your obedient Servants,
(Signed) FRANK N. WARDELL (Chairman).
W. W. VIVIAN.
J. T. EVANS.
W. J. WILLIAMS.
W. A. DARBISHIRE.
C. LE NEVE FOSTER.
H. S. RICHMOND (Secretary).

By MR. WARDELL, Mr. W. W. VIVIAN, Dr. LE NEVE FOSTER, Mr. W. A. DARBISHIRE, Mr. J. J. EVANS, and Mr. W. J. WILLIAMS.

If the present laws are to be altered or amended, it appears to us desirable that most of the quarries should be placed under the inspectors of mines, for the reason that in many cases the quarry is adjacent to a mine or almost forms part of it.

Quarrying involves the application of processes often identical with those in use at mines. The transfer of all quarries to the inspectors of mines would throw upon them the duty of visiting every brickfield in the kingdom. This difficulty might be solved by leaving clay pits and their works with the inspectors of factories as at present, and limiting the jurisdiction of the inspectors of mines to quarries worked for stone and slate. If any such transfer is made, care should be taken to give the inspectors of mines the powers of the inspectors of factories, so as to avoid the waste of time and money caused by dual inspection.

(Signed) F. N. WARDELL (Chairman).
W. W. VIVIAN.
J. J. EVANS.
W. J. WILLIAMS.
W. A. DARBISHIRE.
C. LE NEVE FORSTER.

By Mr. Richmond.

If further legislation is decided upon, the three following courses would appear to be open.

(1.) The obtaining of the mineral, whether above or below ground, to be placed under the inspectors of mines exclusively. The subsequent manufacturing processes, at quarries and metalliferous mines, to be under the inspectors of factories exclusively.

By this means the duties of inspectors of factories and inspectors of mines will be kept entirely distinct.

(2.) Quarries to remain under the inspectors of factories with the additional powers given to them by the proposed special rules.

In this case the Factory Acts should be made to apply to *all* quarries, not at present included owing to the employment of men only, and the use of no steam, water, or other mechanical power. Manufacturing processes on the surface at metalliferous mines should also be left to the inspectors of factories only. This would provide for efficient inspection of quarries under the Factory Acts, more especially if one or two of Her Majesty's inspectors of factories were told off to institute the special rules in the first instance.

(3.) Quarries and metalliferous mines, with the manufacturing processes attached, to be handed over to the inspectors of mines exclusively.

In this case "clay" should be omitted from the definition of a quarry, otherwise dual inspection will be at once created under the provisions contained in the Factory Acts as to the manufacture of bricks and earthenware and under the special rules lately framed for potteries.

But even then difficulties as to demarcation of duties will arise, whilst the anomaly will be created of some slate and stone works being under the Factory Acts, and some under the Mines and Quarries Acts, with different regulations, unless the provisions of the Factory Acts continue to apply to works attached to quarries and mines, and powers be given to the inspectors of mines to enfore the same.

As soon as ever inspectors of mines include any *manufacturing* processes in their jurisdiction difficulties of demaration commence.

(Signed) H. S. Richmond.

With reference to the report, Mr. Richmond, the Secretary to the Committee, remarks :—

"The proposed special rules, having been framed with the assistance of inspectors of mines, quarry owners and managers, and practical quarrymen, would appear to provide for efficient inspection of quarries. The inquiries of the Committee have brought to light in the case of some quarries a very exceptional death-rate from accidents. Whilst the danger awaiting, not only the workpeople employed but the public also, from unregulated blasting operations calls for the speedy enforcement of the rules. All quarries where no power and no protected hands are employed should be brought under the Act as soon as possible for the same reason."

Mr. Richmond has forwarded the following statistical tables :—

TABLE showing the NUMBER of PERSONS employed, the NUMBER of FATAL ACCIDENTS, and the DEATH RATE from ACCIDENTS per 1,000 employed at open SLATE QUARRIES in CARNARVONSHIRE during the Year 1893.

Name of Quarry.	Number Employed in 1893.	Number of Fatal Accidents.	Death-rate per 1,000 Employed from Accidents.
Alexandra - - -	232	—	—
Bettws-y-Coed - - -	20	—	—
Braich - - - -	80	—	—
Bugail - - - -	60	—	—
Cefn Du and Chward Fawr -	186	—	—
Cilgwyn - - -	282	—	—
Cook and Ddol - - -	18	1	55·55
Dinorwic - - -	2,590	2	·77
Dorothea - - - -	420	1	2·38
Foel Clynnog - - -	3	—	—
Gallt-y-Fedw - - -	32	—	—
Glanrafon - - -	334	—	—
Glynrhonwy - - -	268	—	—
Gwerner - - -	32	—	—
Moel Fryfan - - -	160	—	—
New bron Henlog - -	76	—	—
Penllyn - - - -	37	—	—
Penmaehno - - -	142	1	7·04
Penhryn - - - -	2,500	5	2·
Pen-yr-Orsedd - - -	440	2	4·54
Prince Llewellyn - - -	35	—	—
South Dorothea - -	126	—	—
Talysarn - - - -	310	3	9·67
Upper Glynrhonwy - -	99	—	—
Totals for Carnarvonshire -	8,477	15	1·76

TABLE showing the NUMBER of PERSONS employed, the NUMBER of FATAL ACCIDENTS, and the DEATH RATE from ACCIDENTS per 1,000 employed at open STONE QUARRIES in CARNARVONSHIRE during the Year 1893.

Name of Quarry or Firm.	Description of Stone.	Number Employed in 1893.	Number of Fatal Accidents.	Death-rate per 1,000 Employed from Accidents.
Brundritt & Co., Penmaenmawr.	Stone	510	—	—
Darbishire & Co., Penmaenmawr.	Stone	400	2	5·
Kneeshaw, Lupton, & Co., Llandulas.	Limestone	250	1	4·
Kneeshaw, Lupton, & Co., Port Nant.	Stone	150	—	—
Llandulas Quarry Co., Llandulas.	Limestone	89	—	—
Raynes & Co., Llysfaen -	Limestone	130	—	—
Syenite Sett Quarry, Portmadoc.	Stone	18	—	—
Welsh Granite Co., Yr Eifl Quarries.	Stone	400	—	—
Totals - -	—	1,897	3	1·58

"No fatal accidents are recorded at the open quarries in Anglesea. Flintshire, Denbighshire, or Merionethshire during the year 1893, One fatal accident occurred at the sandstone quarry of the Manchester Ship Canal Co., employing 103 persons, and showing a death-rate from accidents of 9·7."

xxiii. *Flax Mills and Linen Factories.*

Attention having been drawn to the condition of the Linen Weaving Sheds in Belfast and the mortality amongst operatives in that city, you directed Mr. Osborn, H.M. Inspector of Factories, who was appointed specially to supervise the administration of the Cotton Cloth Act, to visit and make enquiries, whose known ability in that capacity proved him to be peculiarly qualified to make a report and recommendation on the subject.

As will be observed from the following reports, he visited the Belfast factories and made enquiries into the conditions of work of the Belfast flax mills and linen factories and as to the mortality amongst textile operatives in that city during 1891, Afterwards he distributed printed copies of his Report amongst manufacturers and visited factories in other parts of the country. He subsequently had a conference with the Irish Flax Association and the Linen Merchants' Association at Belfast.

The following are Mr. Osborn's Reports on the subject:—

REPORT OF AN INQUIRY INTO THE CONDITIONS OF WORK IN THE BELFAST FLAX MILLS AND LINEN FACTORIES, AND INTO THE MORTALITY AMONG TEXTILE OPERATIVES, &c., IN THE CITY OF BELFAST DURING 1891.

SYNOPSIS.

Scope of inquiry.
Sources of information.
A defect in registration statistics.
Comparative mortalities.
Belfast, by position, unhealthy.
Estimates of its population.
Number of textile operatives.
Some death-rates and averages.
Inadequate clothing.
Insufficient diet.

Weaving Factories.

Classified.
Excessive humidity.
Bad ventilation.
Suggestions.

Wet Spinning Rooms.

Ventilation of.
Spinners and doffers.
Damp clothing.
Absence of hygrometers.
Suggestion *re* waterproofs.

Roughing and Sorting Rooms.

Excessive dust.
Its effects.
Ventilation of.
A good method of lessening dust.

Machine Hackling Rooms.

Excessive dust.
Improved ventilation of,
Analysis of flax worker's lung.

Preparation and Carding Rooms.

Excessive dust.
Dust pans for drawing frames at York Street Mills.
Remedies for dust at York Road Mills.
" " Ligoniel.
" " Manchester.

Dressing Rooms.

High temperatures.
Health of dressers.
General remarks and inferences.
"Mill fever."
Infectiousness of phthisis and periodical medical inspection.

APPENDICES.

A., B., C., and A.—Tables of Deaths. | I., II., III.—Hygrometrical details.

My investigations in Belfast, with the results embodied in this Report, embraced a complete analysis of the causes of mortality among the city population, in each sex separately, from 10 years of age upwards, during the year 1891; and incidentally a corrected estimate of the mortality among textile operatives proper, (Table A) as compared with that furnished to the Secretary of State (Table B), which I found to include all persons engaged in any kind of factory, whether textile or non-textile, and therefore to be to that extent in excess of the actual mortality among persons employed in the various processes connected with the spinning and manufacturing of flax, and other fibres of analogous nature.

In examining how far the conditions under which these processes are carried on may be unfavourable to health, I visited all the weaving factories, some more than once as seemed desirable, and took a large series of careful hygrometrical observations, which will be found tabulated in convenient form for reference (tables I. and II.); similar observations were also taken in a sufficient number of wet-spinning rooms (Table III.) to indicate their average atmospheres; the presence

of dust and modes of ventilation where existent were duly noted; and collateral information was obtained from all available sources. And here I desire to acknowledge the facilities everywhere readily accorded to me and the intelligent interest taken in my observations by managers and employers, who evince great desire to adopt any means that may tend to ameliorate the conditions of work, wisely recognising that every improvement in the health of their workpeople means better quality and quantity of work. Special thanks are also due to my colleague, Mr. Snape, who was at pains to provide me a concise census of the number employed; to the experienced Superintendent Medical Officer of Health, Dr. Whitaker, for his annual report; and to Mr. Neison, the Superintendent Registrar, who kindly gave me access to the Registers and placed a private office at my service while examining them.

All attempts to arrive at accurate statistics of mortality among an industrial population encounter this difficulty on the threshold, that in the cases of widows and married women only the occupation of the husband is given, so that there is no record of any they may themselves have followed prior to marriage; this lacuna was strongly apparent in 1883, when accurate knowledge of the death-rate among weavers in Blackburn was desiderated, and is again in evidence in the case of Belfast, where a preponderating number of women over men are employed in the textile factories: this in all probability explains the apparently marked decrease in the number of deaths after 30 years of age among female mill-hands, when compared with the ratio of all other classes among whom they and their work-histories become merged by wifehood so far as the registers are concerned, where phthisis claimed girl-wives of 17, 18, 19, and 20 years of age. It is impossible to take even a cursory glance at the Tables A and C and not be struck by the facts that the deaths from phthisis and respiratory diseases are more than half of the total from all causes (2237 to 4151): that the deaths among textile operatives from phthisis, &c., are *284* to *130* from other causes, and that up to 30 years of age the deaths from phthisis among *females* are, of mill-hands 120, to 285 of all other classes, clearly pointing to the existence of some special conditions affecting textile operatives, as distinguished from the ordinary pre-disposing causes common to the major portion of the community. These special conditions may be summarised as dust, damp, heat, and imperfect ventilation, for all which remedies or at least palliatives are certainly not indiscoverable. Dr. Whitaker well points out that 'Belfast is not, 'and, from the nature of its position and soil, can never be a very 'healthy city. Built on the estuary of the Lagan—on the mudbanks 'reclaimed from that river—a large portion of the city is scarcely 'above high-water mark. The soil is heavy, retentive, and impervious, 'in the upper districts generally stiff clay. We have little sunshine; 'an undue proportion of moisture in the air, a high ground water, and 'our mean temperature is lower than that of any of the large urban 'districts in Ireland.' The population of Belfast is estimated by Dr. Whitaker as about *275,000*; by Mr. Neison as nearer *300,000* (based upon its 60,000 houses); by the Registrar-General's return as *265,000*.

The number of operatives engaged upon textile fibres is 30,000, of whom some five-sixths are females. The general death-rate in 1873 (population, 200,348) was 23·3 per 1,000; in 1891, 25·5 per 1,000; in 1892, 26·1 per 1,000; and for the last decade 24·7.

Phthisis and respiratory diseases averaged in 1873, 10·6 deaths per 1,000 of population; in 1892, 10·9 deaths per 1,000; so that the ratio remains nearly the same, notwithstanding the assumably improved

sanitation during the last 30 years; but the poorer families perforce gravitate to the cheaper and less desirable tenements, which with insufficient food, and inadequate clothing are common predisposing factors in any large aggregate of population.

I could not fail to notice that, as in Lancashire, the use of flannel is 'conspicuous by its absence' from the clothing of the operatives, who wear merely linens or cottons, which retain moisture and cause chills, thus adding to the perils of work in heated atmospheres. The staple diet of the majority of the women would also seem to be chiefly bread and tea, four times a day, the latter stewed with the sugar in it which effectively extracts the maximum of tannin and certainly induces chronic dyspepsia. Many of the children I found on inquiry have porridge, eggs, or potatoes, but those of poorer physique generally proved to be living upon the tea and bread régime. The cheap meals provided by some employers at cost price and without charge for cooking do not seem so much appreciated as they should be.

Leaving the habits of the people, noteworthy from their bearing upon the general health, the specially unhealthy conditions that attach to the various processes of flax manufacture in each department may now be dealt with seriatim to be followed by practical suggestions for their amelioration.

Weaving Factories.

All these, 42 in number, were visited, in some cases twice for more extended observation. They will be found divided into two groups (Tables I. and II.), Table II. consisting of the damask-weaving rooms, where steam is not infused as damp would damage the pattern cards and top-hamper of the Jacquard looms; and with these are classed also the rooms where unions (cotton warp and linen weft) are manufactured of material already bleached, &c. In this group there is generally little dust apparent, but what there is consists of very small particles of flax filament kept in suspension while the looms are in motion. The ventilation in all sheds is defective, and the atmosphere close and oppressive.

Of the sheds in Table I. it will be observed that in 13 out of the 29 the humidity reached saturation or within a degree of it, while in some cases where observations were taken at several points there were variations both of temperature and of humidity which deserve notice, because while it was stated that the finer counts of linen yarn require high temperature and a maximum humidity, the weavers in the lower temperatures were doing as well as those where temperature and humidity were highest.

It is all 'rule of thumb' and tradition, the steam is generally infused from uncovered pipes at a considerable heat as will be seen from some tests given in the Table I., so that the pipes radiate at any rate an equal heat to that of the steam they convey and raise the temperature needlessly; the pressure is also unnecessarily high, and the amount of condensation very great, the floors being quite wet. Of course there is no dust under such circumstances, but in the absence of proper ventilation the atmosphere is close and unwholesome, since with complete saturation, evaporation from the body ceases, simply because there is no room for the body moisture to evaporate into, hence increase of body temperature above normal (98°) and consequently more or less physical distress; besides this the thin bodices of the women soon become damp, adding to the risks of bronchitis and other analogous ailments on going into the outer air, besides the dangerous temptation to enjoy deep

inspirations of the cool outside atmosphere. Doubtless where the physique is robust it may become acclimatised to these conditions which will remain perilous to those of weaker constitution. In one shed visited shortly after 5 p.m., where saturation prevailed, the steam was blowing in at full blast, the place so filled with vapour it was impossible to see half-way its length; the jets were directed downwards, impinging upon the bodies of the weavers and the garments they would go home in, and after standing in the midst of the jet for two minutes the back of my hand was moist enough to damp a strip of litmus paper. At another factory where saturation was already reached a weaver asked me to come later on in the afternoon again to see what it was like, but there was no necessity for seeing more, as it was then bad enough. No such state of things ever existed in Lancashire before the Cotton Cloth Act, as the weaving of a sized cotton warp in such an atmosphere would be impossible. The system is unreasonable and wasteful, resembling nothing so much as the Chinese extravagance immortalised by Elia, of burning a house to roast a pig; for I satisfied myself by feeling the warp threads coming into weaving, and on the beam, that the result is not commensurate with the steam expended; and am inclined to think the size or 'dressing' which usually consists of flour, tallow, and Irish moss may be too 'hard' and might be softened by the use of a deliquescent to attract moisture. A manufacturer to whom I mentioned this promises to experiment in this direction, and has also written me since my departure that he finds his weaving not impaired by keeping humidity two degrees below the dry temperature. He adds: 'I am 'certain from the figures you are quite right about relative degrees and 'amount of moisture contained in the air," and 'that the theory of 'the more heat' (supposed to be necessary for fine work)' is all 'wrong.' If it were also necessary for the warp to be absolutely moist, then means of local application should be contrivable without the atmosphere of a vapour bath for the operatives. Economy and efficiency alike dictate that wherever humidity is produced by steam-jets these should be so arranged as not to impinge upon the workers, the pipes should be covered with non-conducting composition, and the steam injected at low pressure, which also means a lower temperature for the room.

Suggestions.

1. Improved ventilation: on the fan system successfully adopted in Lancashire under the Cotton Cloth Act (one 14 or 15 inch extracting fan for every 2,500 square feet of floor surface.)

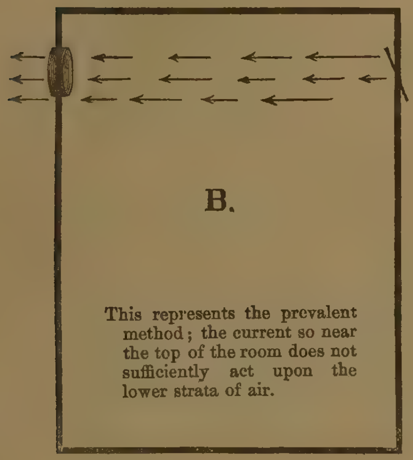
2. Regulated humidity: a difference of two degrees always to be kept between the wet and dry-bulbs (*e.g.*, dry-bulb, 75°; wet-bulb, 73°). This avoids the necessity for a complex schedule, and allows adequate humidity for practical purposes.

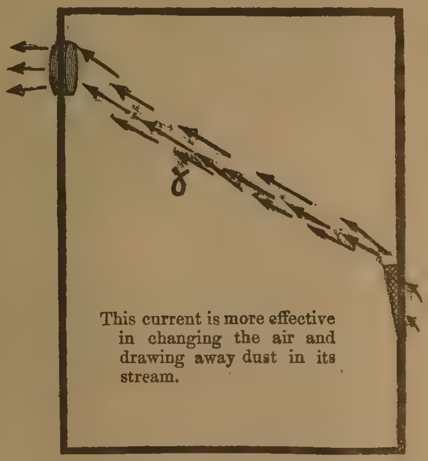
3. Hygrometers to be affixed, &c. adopting the rules of the Cotton Cloth Act, as to their being kept in working order, and readings registered, &c.

Wet Spinning Rooms.

Hygrometrical observations recorded in 21 rooms will be found in Table III.; a number of others were visited and tested but presented no special features not included in those subjected to more lengthened observation. In the cases where saturation was reached it appeared to arise from imperfect ventilation: the best conditions existed where the ventilation was good, and the pipes conveying the steam to the troughs jacketed. A common error in the arrangements for ventilating is that

the windows on the same side of the room as the fans are open, which naturally lessens the cross current which would be maintained if only the range opposite the fans were open. These openings also are as a rule too near the top of the room for the best ventilation, as may be understood from these diagrams:—





The highest humidity was in the *coarse* (tow) spinning rooms, where the fibre is said to need greater heat in the water to render it supple and spinnable, but that high temperature and humidity are not inseparable from coarse spinning is seen in the readings (78°, 72°) of No. 18 (Table III.)

Special scrutiny was given to the persons employed in the wet spinning, as here the majority of children are employed, for whom 10 hours of the heat and vapour seems a long day's work; and changes from the heated air to the cold outside air conducive to chest affections. I noticed particularly that for several inches above the waist the clothing of the boys and girls, especially of the shorter ones, was saturated by the fine spray from the spindles. As here are the most delicate organs of the human frame, the danger of developing lung diseases at an early age where the constitution is weak or predisposed must be enhanced by this continuously damp clothing, worn all day, with, in cold weather especially, sharp alternations from heat to cold. The majority of these "doffers" that I saw in the schools visited appeared, however, in fairly in good health, though, in many cases, of evidently poor stamina, and inferior in growth to children of the same age in Lancashire.

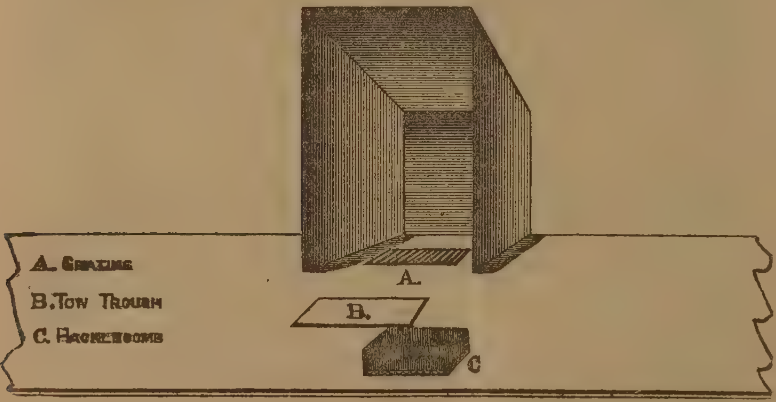
Hygrometers are not in use in any of these rooms, where they would be a valuable aid to managers in ascertaining and regulating the atmospheric states

Suggestion.

Seeing that the waterpoof 'overall' is simply an apron, affording no protection from the spindle spray above the waist, it should be made with a 'bib' to protect the chest also, and be worn by all.

'Roughing' and 'Sorting Rooms.'

The 'dusty' processes have now to be dealt with. The 'Rougher' performs the initial process of separating the 'line' (or fine fibre) from the 'tow' (or coarse and shorter fibre), and the 'Sorter' deals similarly with the "line" according to its qualities. In both operations the work is similar, consisting of drawing the fibre by 'stricks' or handfuls through a coarse or finer comb of steel hackles. They work in a continual cloud of dust composed of large and small particles of the fibre, which is inhaled, and irritates and dries the throat and gradually finds its way into the lungs, producing 'chronic inflammation of the 'lining membrance, which soon manifests its presence by the worker 'being attacked each morning with a paroxysm of dyspnœa and 'coughing.' A worker suffering thus is said to be 'poucey' (pouce =dust=poussière). Most of these workers whom I questioned had experience more or less of this condition, as might be expected from the state of the air. Some roughing rooms have no ventilation but windows opening at the upper part, and the workers face the wall, which of course reverberates the dust upon them, which lays the foundation of 'mechanical phthisis.' Other rooms, more modern, are large and lofty, and provided with powerful fans, but still dusty. The best arrangement I saw was at the York Street Mills, where a trunk exhausted by a large fan runs along the side of the room with a metal hood opposite each berth, and a grating through which the dust is drawn forward and down from the face of the workman. I give a sketch out of perspective to make it clearer.



It seems very desirable that some similar, possibly simpler and less expensive, mode of exhausting the dust below the breathing line should be generally or compulsory adopted, for it is the finer dust that rises and is most insidious, the heavier particles sooner falling.

Machine Hackling Rooms.

Here the fibres are further combed by machinery, tended by boys upon a staging to reach their work, which evolves a large quantity of

fine dust. Sometimes "roughing" goes on also in these rooms, some of which are very bad, and the lads powdered with dust. I have seen in Manchester a machine-room freer from dust than any in Belfast, fans being placed on the side of the room where the machines are, and inlets provided in opposite windows about 6 feet from the ground (on the principle shown in diagram 'γ' on page). The late Dr. C. D. Purdon states that 'when the machine-boys become 'poucey' numbers of them 'leave the mills on account of suffering from chest affections and go 'to other trades, where they linger out a diseased existence or die 'from phthisis.'

It may be noted that in two cases of flax-workers' phthisis, 10 grains of incinerated lung gave—

(1) 3·881 of ash, of which 0·227 was silica;
(2) 2·609 " " 0·47 "

indicating the presence of flax-dust, of which silica is a constituent.

Preparation and Card Rooms.

Dust is again the distinguishing feature of these departments, where the work is carried on by women, among whom Dr. Purdon, in 1872, states the mortality as 31 per 1,000; and Dr. Whitaker, in his report on the health of Belfast, 1892, says 'the carder's average length of life 'is only 16·8 years (of work). If a girl gets a card at 18 her life is 'generally terminated at 30. The preparer's average is 28·7 years of 'work.' 'Mechanical feeders' somewhat lessen the dust, and fans remove more, but it is quickly apparent upon the hair, &c., after a short while of work.

In the York Street Mills the drawing frames are being provided with shallow metal trays placed below the rollers, which catch the dust and prevent it falling to the ground and being suspended in the air, and in their York Road Mills a large trunk has been constructed below the carding engines with a powerful fan which prevents a large quantity of dust from rising. This is, however, a costly plan, for which also there would not be space everywhere. At Ligoniel small steam-jets appeared to materially lessen the dust, and might perhaps produce good effect in the preparation room; and in the Messrs. Renshaw's flax-mills in Manchester a similar result seems to be achieved by the use of a moderate humidity. There is, however, still room for improvements, which may possibly be found in a better distribution of more fans of smaller size than the fewer large ones generally adopted: for instance, an 18-inch fan between each two carding engines with a diagonal draw from the opposite side (as in diagram 'γ').

Dressing Rooms.

'Dressing' or sizing the warps is carried on in the old-fashioned way, formerly common in Lancashire also, before the introduction of 'slashing;' and the warp is dried by a highly heated atmosphere instead of being passed over heated cylinders. Hence the temperature of these rooms is always high; 101° and 117° were the highest noted. The common saying, 'no one ever sees a dresser's funeral' implies that the men are generally healthy; and such is their appearance. Dry heat can be borne with little distress, as the body temperature is kept normal (98°) by the evaporation set up from and through the skin. With temperate living and reasonable prudence when leaving work for the outer air a robust constitution should experience no ill-effects. It may be observed that as hot air in motion is a quicker drier than hot

air stagnant, the use of fans here must benefit alike the worker and the work.

Experience has made it clear that the lassitude caused by damp heat is materially lessened by good ventilation and reduction of humidity within reasonable limits; and dusty occupations are notably palliated by constantly changing the air, and it is evident from the mortality statistics, coupled with observation that dust is the predominant factor in conducing to respiratory disorders in the flax-processes, and should therefore be diminished as much as possible. It is to be regretted that respirators are so disliked by both sexes, as they would be of material benefit in this direction.

Other ailments to which women are subject, are common to all occupations that involve standing for a long time.

Doffers, &c., in the wet spinning are often attacked on first employment with what is called 'mill fever' after a few days of work. The late Dr. Purdon says: 'No treatment is required or sought for, as the 'worker knows it means a certain course and will leave him *compara-'tively* well, but rather weak for a few days, when he may return to 'work without any fear of taking it again.' An experienced schoolmistress, however, informed me that sometimes the effect was observable for as long as a month. In such cases there must be considerable constitutional disturbance and certainly atony; and it is remarkable that no tonic treatment appears to be tried either as prophylactic or redintegrative, since a child or young person must, for a time under such circumstances, furnish a favourable nidus for the development of any zymotic or other ailment to which there may be constitutional predisposition.

Now also that phthisis is recognised to be infectious disease, it is worth consideration whether some periodical medical inspection of children and young persons might not be desirable in the interest of the state as well as of the individual, where a special disease seems so cognate with the employment.

I have now gone through the various matters which formed the subjects of investigation, and in bringing this report to a conclusion venture to hope that no important point upon which information was desired, has escaped observation.

E. H. OSBORN.

APPENDICES.

Table A.—Corrected table of deaths of Flax and linen factory operatives in Belfast, 1891.

,, B.—Table of deaths of "Millhands" in Belfast, 1891, as handed to the Secretary of State, and forwarded from Home Office for examination.

,, C.—Deaths of all "other classes" in Belfast, 1891, from 10 years of age upwards, shown separately for each sex, for comparison with Table A. similarly set out.

Table I.—Hygrometrical observations in humidified sheds.

,, II.—Hygrometrical observations in non-humidified sheds.

,, III.—Hygrometrical observations in wet spinning rooms.

Table A.

Corrected Table of Deaths of Flax and Linen Factory Operatives in Belfast, 1891.

Ages.	10–14.	15–19.	20–24.	25–29.	30–34.	35–39.	40–44.	45–49.	50–54.	55–59.	60–64.	65–69.	70–74.	75–79.	80–84.	Total.
Phthisis - - -	5	61	44	33	19	18	11	6	1	2	—	—	—	—	—	200
Respiratory diseases - -	2	2	2	6	9	8	10	10	11	9	6	5	3	1	—	84
All other causes - -	4	20	19	7	17	10	10	8	5	7	7	5	7	2	2	130
Total - - -	11	83	65	46	45	36	31	24	17	18	13	10	10	3	2	414

Table B.

Table of Deaths of "Millhands" in Belfast, 1891, as handed to the Secretary of State.

Ages.	10–14.	15–19.	20–24.	25–29.	30–34.	35–39.	40–44.	45–49.	50–54.	55–59.	60–64.	65–69.	70–74.	75–79.	80–84.	Total.
Phthisis - - -	6	76	58	40	23	18	11	6	1	2	—	—	—	—	—	241
Respiratory diseases - -	1	6	5	8	10	10	13	15	12	11	6	10	4	2	1	114
All other causes - -	2	27	27	9	21	11	12	12	7	8	9	12	8	7	1	173
Total - - -	9	109	90	57	54	39	36	33	20	21	15	22	12	9	2	528
Excess figures of Table B. -	—	26	25	11	9	3	5	9	3	3	2	12	2	6	—	116

Excess Totals of Deaths, Causes of, Table B.

Phthisis - - -	41
Respiratory diseases - -	30
All other causes - -	43

Note.—The difference in these Tables arises from the fact that Table B. contains all deaths of persons employed in *all* industries in Belfast; Table A. only those of persons employed in the spinning and weaving of flax, cotton, linen, &c. = all textile hands.

MORTALITY TABLES, showing DEATHS of TEXTILE OPERATIVES (A) and of ALL OTHER CLASSES (C) in BELFAST CITY for 1891 from Ten Years of Age, arranged in Quinquennial Periods separately for each Sex.

It may be noted that among Females deaths from Phthisis in A : C are 5 : 51 from 10–14 years.
" " " A : C " 50 : 74 " 15–19 "
" " " A : C " 36 : 73 " 20–24 "
" " " A : C " 29 : 87 " 25–29 "

TABLE A.—TEXTILE OPERATIVES.

SEXES	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	TOTALS.
AGES	10–14.		15–19.		20–24.		25–29.		30–34.		35–39.		40–44.		45–49.		50–54.		55–59.		60–64.		65–69.		70–74.		75–79.		80–84.		85–89.		90–105.		
Phthisis	—	5	11	50	8	36	4	29	2	17	5	13	3	8	5	1	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	200
Respiratory diseases.	—	2	—	2	—	2	1	5	—	9	4	4	4	6	6	4	3	8	3	6	3	3	3	2	2	1	1	—	—	—	—	—	—	—	84
All other causes	1	3	4	16	4	15	1	6	4	13	4	6	2	8	3	5	4	1	3	4	4	3	3	2	3	4	2	—	1	1	—	—	—	—	130
Totals	1	10	15	68	12	53	6	40	6	39	13	23	9	22	14	10	8	9	6	12	7	6	6	4	5	5	3	—	1	1	—	—	—	—	414

TABLE C.—ALL OTHER CLASSES.

Phthisis	28	51	53	74	75	73	54	87	32	48	29	34	32	34	17	16	19	9	4	10	5	1	1	—	—	2	—	—	—	—	—	—	—	—	788
Respiratory diseases.	7	4	9	10	20	6	11	14	21	17	22	23	26	50	46	57	51	86	62	93	68	107	53	82	38	63	21	38	16	17	6	16	2	3	1,165
All other causes	49	35	49	30	50	42	34	45	52	73	48	50	65	74	63	93	74	107	68	87	104	112	85	99	40	50	33	33	11	18	2	4	2	3	1,784
Totals	84	90	111	114	145	121	99	146	105	138	99	107	123	158	126	166	144	202	134	190	177	220	139	181	78	115	54	71	27	35	8	20	4	6	3,737

HYGROMETRICAL OBSERVATIONS in BELFAST WEAVING FACTORIES.
May, June, 1893.

TABLE I.

AVERAGE PER-CENTAGE of OUTSIDE HUMIDITY, 63, being MEAN of PER-CENTAGES varying from 58 to 71.

No. of Factory.	Dry Bulb. Degrees Fahrenheit.	Wet Bulb. Degrees Fahrenheit.	Percentage of Saturation.	Temperature of Steam at Inlet.	No. of Factory.	Dry Bulb. Degrees Fahrenheit.	Wet Bulb. Degrees Fahrenheit.	Percentage of Saturation.	Temperature of Steam at Inlet.
1	76	76	100		25	77	76	94	
2	75	75	100			79	76·5	85	
3	74	73	94		28	75	72	84	
5	71	68	83	102°		76	71	75	
6	73	69	79	100°	31	78	72	71	
	76	69	67		32	77	77	100	
7	75	73	89	129°		75	75	100	
	77	72	75			75	75	10	
8	72	69	84	112°		77	77	100	
	74	68	70			77	77	100	
9	77	77	100	131°		77	76	94	
	77	77	100		2	74	74	100	
10	72	72	100			76	75	94	
10	76	76	100	120°	3	75	74	94	
	79	78	95			76	74	89	
	79	77	90		34	80	78·5	92·5	
11	87	82	77	130°		80	79	95	
	85	82	85			81	78	85	
12	87	83	81			83	78	76	
13	77	77	100	112°	1	76	75	94	
14	75	75	100	142°		77	75	89	
	78	75	84			77	75	89	
15	70	68	88	115°		78	77	94	
	71	68	83			79	76	85	
17	77	77	100		39	81	79	90	
	79	78	95			81	76·5	78	
18	72	65	65			81	75·5	74	
19	75	67	62		4	75	71	79	
	76	68	63		41	77	77	100	
20	75	71	79	110°		79	77	90	
21	77	72	75			79	76	87	
23	74	73	94	138°		78	76	89	
	73	72	94			79	78	95	
24	75·5	75·5	100			80	78	90	
	78	78	100						

Table II.

Damask (Jacquard) Weaving Factories (No Steam).

14	71	64	65		36	70	60	53	
16	70	64	69		37	74	70	79	Cotton W.
22	78	70	63						
26	80	76	80		38	72	60	51	
27	70	64	69			74	65	58	
29	71	61	53		40	81	75	72	
30	76	67	59			80	74	71	
33	67	60	64			80	73	67	
53	81	74	68			79	74	75	

Table III.

Hygrometrical Observations in Belfast Wet Spinning Rooms.

Reference No.	Dry Bulb, Degrees Fahrenheit.	Wet Bulb, Degrees Fahrenheit.	Percentage of Saturation.	Reference No.	Dry Bulb, Degrees Fahrenheit.	Wet Bulb, Degrees Fahrenheit.	Percentage of Saturation.	—
1	85	81	80	10	86	84	90	
	83	87	72	11	87	83	81	
2	75	75	100	12	80	80	100	
3	78	77	94	13	80	74	71	Fine spinning.
	80	78	90	14	80	77	85	
4	75	72	84	15	79	76	85	
	75	73	89	16	77	70	67	Fine spinning.
	79	79	100	17	77	72	75	Fine spinning.
5	79	75	80	18	78	72	71	Coarse spinning.
6	89	85	81	19	79	75	80	
7	81	81	100	20	75	68	66	
8	86	79	68	21	80	75	75	
9	83	76	68					

IRISH FLAX MILLS.

Dear Sir, Manchester, December 4, 1893.

In pursuance of the request of the Irish Flax Association for an interview in reference to the proposed Special Rules for Flax Works, a meeting was arranged for November 3rd and was attended by representatives of the leading firms as well as by a Committee of the Linen Merchants' Association, comprising the president (Mr. C. H. Richardson), the vice-president (Mr. W. Crawford), Mr. R. G. McCrum, and the secretary, Mr. Ward.

The chair was occupied by Mr. R. H. Reade, chairman of the Flax Association and of the York Street Mills Company, who kindly introduced me to the Meeting, commented on the fair spirit of the report, and pointed out that comparison of the flax operative and general death-rate showed scarcely any difference in the form of percentage, but admitted what I had already explained that it is difficult to arrive at accuracy for the reasons given in the Report. I further pointed out that the special fact that female deaths were, of flax operatives from 15 to 19 years of age, 50 to 74 of the rest of the population from phthisis clearly indicated some abnormal conditions to which the former were subject.

With regard to the Special Rules I explained the advantages of the Secretary of State dealing with the matter in the proposed mode over a Bill, in the passage of which, under present conditions of legislation, less satisfactory restriction might be imposed; and proposed the Rules should be taken and discussed seriatim.

Doubts were expressed as to the practicability of ventilating weaving rooms as recommended, but I gave details of the results of this system as carried out in Lancashire under the Cotton Cloth Act, which appeared to satisfy the meeting.

The Humidity regulations after some few explanations as to the instruments and hygrometrical facts received no opposition.

On approaching the subject of the wet spinning rooms I informed the meeting that since the Rules had been drawn up the undoubted superiority of splashboards to any other form of protection to the workers had been evident to me in Scotland as well as the greater comfort and cleanliness of the work and the mill; and I suggested that waterproofs would be unnecessary if they were adopted.

The suggestion met with favour, and this may be specially noted as an indication of the extreme goodwill and broadmindedness of the employers in respect of possible improvements, for the introduction of splashboards will completely revolutionise the aspect of Irish wet-spinning.

The objection to the suggested form of overall covering the chest was that it would create perspiration beneath itself, which as aprons are already in use and the addition of an adequate bib is a trifling one, did not appear of much weight but I agreed such need only be provided for children and young persons whose shortness of stature rendered the apron that suited adults ineffective. The splashboards and the additional words of the rule will provide against all contingencies.

No objection was raised to the rules as to humidity applying here.

Objection was at first raised on the regulation proposed to deal with the dust of "Roughing Rooms," but the Chairman stated they were convinced it was good having just completed such an arrangement at their own mills, and already been thanked in a memorial from the roughers they employ for the improved conditions of work.

This practicable proof was irresistible. Machine hackling rooms were next dealt with, and I mentioned that I had seen some hackling machines in which the "sheets" (*i.e.*, the endless revolving cards) were covered, and it was thought the Rules should be modified to allow any effective arrangement to be adopted, Mr. Reade especially being inclined to experiment as to the feasibility of covering the machines used in Belfast. I have added the requisite words to give effect to this possibility.

Respirators formed the next subject for discussion. It was stated that men and women would not wear them, the former chiefly because they are generally in the habit of chewing tobacco while at work. The opinions upon this point were practically unanimous, and I think have

reasonable grounds. In many cases when attempts have been made by employers in other industries to introduce respirators they have invariably failed. I feel rather reluctant to abandon the rule so far as children and young persons are concerned; it is possible that were it made a condition of employment and understood as such by parents, the custom of wearing respirators might take root and possibly be continued by those who had found benefit from their use, and I have expressed this since to Mr. Reade, who with his usual freedom from bias, says he will try them if I will let him know the best form of respirator to use (I am endeavouring to have one devised as simple and cheap in form as practicable).

I have added the words necessary to limit the proposed rule with your approval unless you decide to abrogate it entirely.

The proposition to oblige provision of hot and cold water, soap, towels and brushes was objected to, as far as *soap* and *brushes*, specially as the former would invariably disappear, and the latter be lost or spoiled. It was also stated in cases where from 1,000 to 3,000 persons are employed neither time nor accommodation could be found for these purposes. "*Factory*" also appeared vague being generally used of a weaving place as distingaished from a Spinning "*Mill.*" If confined to the former by the addition of "*weaving*" for definition, I do not think there would be any objection, but on the score of uncleanlines of the work the rule would hardly seem requisite. The dust in the cardrooms &c., is not of a deleterious nature like the dust of lead, dry powders, or bronzing powders, and only objectionable as getting into the air passages, and working mischief owing to its insolubility; externally it is merely dirt. Possibly this regulation might be cut out, modified or deferred as the introduction of the various improvements of the wet and dusty processes will involve, *per se*, more cleanliness. There is clearly a strong desire to ameliorate as far as practicable the condition of the workpeople. Indeed already some are proceeding with matters germane to the rules notwithstanding that they are not formally in force, which is very satisfactory.

Undoubtedly in some instances the cost will be not insignificant.

In the case of the humidity rules, from my experience of the initial difficulties of the Cotton Cloth Act it will require considerable patience to get the management of the instruments properly attended to and understood, and it might be desirable to issue with the rules when sanctioned some brief hints on the subject. I am also getting together a few diagrams of satisfactory methods of dealing with some points of ventilation, &c., and with splashboards, which will form an Appendix to the Supplemetary Report on the Flax Works in other parts of the United Kingdom.

It is probable that great forbearance will be necessary in the "Humidity" rules as restriction is so entirely new; and in the case of the coarse wet spinning will require great attention and care, more particularly in times when there is a great difference between the outdoor and indoor temperatures.

I append copy of the minutes of the meeting as taken by Mr. Morton (Secretary to the Flax Committee) and forwarded to me, also a copy of the Special Rules with suggested modifications.

Yours faithfully,

E. H. Osborn.

R. E. Sprague Oram, Esq.,
&c. &c.

COPY of MINUTES of MEETING sent me by Mr. W. MORTON, SECRETARY IRISH FLAX ASSOCIATION, BELFAST.

At a conference held on Friday, November 3rd, 1893, between Mr. Osborn, H.M. Inspector of Factories, and the Flax Spinners' Association, and some members of the Linen Merchants' Association, in relation to the proposed special rules applicable to the spinning and weaving of flax, the following definitions and changes were represented to be necessary by the meeting :—

Paragraph 2.—"*Humidity*" standardised wet and dry bulb thermometers, are thermometers tested at Kew to act hygrometrically.

Paragraph 6.—"*Wet Spinning Rooms*" with reference to waterproof overalls to cover the chest, the general opinion of those present was that the workers would decidedly object to wear them, and also that they were unnecessary.

It was agreed that splashboards should be allowed as an alternative.

Paragraph 8.—"*Roughing and Sorting Rooms*."—That for respirators some alternative plan be allowed.

Paragraph 10.—"*Dressing Rooms*."—It was explained by Mr. Osborn that the ventilation required may be produced by fans.

Paragraph 9.—"*Machine Hackling Rooms;*" "*Preparation and Card Rooms*."—Exhaust fans and inlets to be used, unless some other equally effective means be provided. It was also explained by Mr. Osborn that the soap, towels, and brushes should be provided for dusty or dirty rooms, and that the brushes meant clothes brushes.

SUPPLEMENTARY REPORT OF INQUIRY INTO THE CONDITIONS OF WORK IN FLAX MILLS AND LINEN FACTORIES IN THE UNITED KINGDOM.

SYNOPSIS.

Scope of inquiry.
Sources of information.

Weaving Factories: England and Scotland.

Conditions.
Cleanliness.
Ventilation.
Hygrometry.

Weaving Factories: Ireland.

Humidity.

Wet Spinning Rooms: Scotland and England.

Decay of flax spinning in Leeds.
"Splashboards."
Humidity.
Coarse wet spinning—Ireland.

Wet Spinning Rooms: Ireland.

Bessbrook Co. and Splashboards.
Splashboards, general—Abroad.
Recommended and detail.

Dusty Processes.

Found generally alike.
Results of exhaust from Hackling Room.
Cardrooms unsatisfactory.
Covers on Hackling machines.
Exhaust for drawing frames.
Respirators.
Recommended for children and young persons.
Medical opinions :—
Dr. Keith Anderson, Arbroath.
Dr. Sneddon, Cupar, Fife.
Dr. Will, Aberdeen.
Dr. Key, Montrose.
Dr. Campbell, Dundee.
Dr. Miller, Dundee.
Dr. Keith Anderson, Arbroath (No. 2).
Dr. St. George, Lisburn.
Dr. Palmer, Newry.
Dr. Boyd, Lifford.
Dr. Taylor, Tanderagee.
Dr. H. S. Purdon, Belfast.
Dr. Dickson, Ballynahinch.
Dr. Newett, Ligoniel.
Dr. D'Evelyn, Ballymena.
Dr. Dougan, Portadown.

APPENDIX.
Diagrams with Index.

In pursuance of directions to continue the investigation, begun at Belfast, and already reported, in the other chief seats of flax spinning and manufacturing in the United Kingdom, I now beg to present this Supplementary Report.

In the course of this inquiry I have visited practically all representative centres, including Leeds, Kirkham; in Scotland,—Dunfermline, Dysart, Kirkcaldy, Dundee, Arbroath, Cupar, Fife, Aberdeen, Montrose, Forfar, and Kilbirnie; in Ireland—Lisburn, Carrickfergus, Ballymena, Portadown, Lurgan, Newry, Bessbrook, Drogheda, and Strabane. As in the case of Belfast, the conditions of employment in the various processes have been carefully observed, where necessary the humidity of the atmosphere has been thoroughly tested, the appearance of the workpeople scrutinised, and as far as possible their liability or otherwise to special ailments arising from the nature of the work in damp or dusty circumstances ascertained; and in order to give more weight to this portion of the investigation, the results of their actual experience have been obtained from a number of certifying surgeons, who in many cases hold additional appointments, giving them unusual opportunity for accurate observation and extended knowledge of the people among whom they live. Those opinions will be found later on, and it will be seen they tend to confirm the conclusions already drawn independently from observation and inquiry among the factories. In order to narrow the issue to practical points, they were specially desired to confine their remarks to their own experiences, which thus renders their testimony the more valuable.

Through the courtesy of employers, and of ventilating engineers, &c., I am enabled to append diagrams of arrangements that have been found satisfactory here and abroad in lessening dust, &c., also of various forms of splashboard in use in different places.

These are given as sent me, the time at my disposal not permitting their reduction to uniform scale.

In dealing with the various processes, it will be convenient perhaps to take them in the same order as in my former Report on Belfast, and to begin with the weaving factories.

Weaving Factories (Scotland and England).

Scotland and England.

It may be stated generally that outside Ireland artificial humidity is not produced for the purposes of linen manufacture. This, because either the looms are engaged on damasks as in Dunfermline, or on the coarser classes of flax fabrics where the yarns, not being fine, are little affected, so far as weavability goes by atmospheric changes. It is impossible to go into a Scotch linen factory in Dunfermline, Kirkcaldy, or Forfar, and not be struck by the contrast to weaving sheds in other parts of the kingdom. They are spacious and lofty, and the machinery has ample room, not being crowded as with us (sites are doubtless cheaper), they are also scrupulously clean; in one case I was told the floor is swept three times in the day and as a natural corollary, the weavers are tidier and more comfortably dressed.

In some places also lavatories are provided, well fitted up with brass basins, hot and cold water, &c., where the women can tidy themselves up before leaving work, or at meal times, so that they can do any errands they may wish on the way home, &c. An employer wisely observed, "we find it to our own advantage to make our people as comfortable as possible," and this was a general feeling. In most cases the warp-dressing department is not partitioned off from the remainder of the shed, so that no great heat is produced or requisite. The ventilation at the time of my visit was good of its kind, but in bad or cold

weather I imagine must be chiefly closed, as otherwise the down draughts would be great upon the workers; it is here that the advantage of extracting fans comes in, as they not only change the air gradually, but remove the carbonic acid gas of respiration, the ill-effects of gas combustion, where gas is still used, and the fine particles of the fibre which are suspended in the air while the machinery is in operation, besides being available as well in cold weather as when, in summer, the air inside and outside too nearly approaches equilibrium to admit of "natural ventilation" of any effective value. In one instance (Dundee) in one portion of the shed where a fabric was being made, in which the terms of the contract forbade any dressing for the yarns, the weavers towards mid-day had the appearance of having their hair powdered from the amount of fluffy filament which had settled upon them, caused by the trituration of the warp in passing through the reed comb. The bulk of this light fluff would have been removed by fans arranged in the top of the room as in Lancashire cotton cloth factories. In the same shed some attempt was made to temper the atmosphere by forcing air, by a fan, into it, from a spray-chamber where, on occasion, disinfectants could also be combined with the air. I did not find any very sensible impression made by this at the time of my visit, the point of admission was too limited to ensure anything like equable diffusion of the modified atmosphere in so large a room. Hygrometers were here, but not in working order, and the firm had constructed some rough wooden hygrometrical indices set on a quadrant and scaled by comparison with a hygrometer. These were hung about the room, and indicated changes of humidity by the contractibility of the wooden index, on the same principle as the instruments, made in Germany, of thin strips of linden bark. Of course they only give approximations to accuracy. A hygrometrical test showed there was very little humidity present.

Weaving Factories (Ireland).

In the majority of Irish weaving factories outside Belfast artificial humidity is produced, but seldom to the same extent. In none did I find actual saturation as there, in only two cases excess over the 2° of difference proposed, and both these cases were the result of a careless disregard of economy in the arrangement of the steam and of the fact that there is no instrumental check on the process, added to which the carrying pipes were uncovered and the pressure of the steam too high. In some places where similar qualities of linen to those manufactured in Belfast were being made the humidity was well within the proposed limits, occasionally reaching within a half degree, but this was exceptional. The ventilation was by no means satisfactory, for the reasons already fully stated. Ireland.

Wet Spinning Rooms (Scotland and England).

Very little wet spinning is now to be found in England and Scotland. The spinning of fine flax yarns has almost wholly gravitated to Ireland. In Leeds, where formerly there were some 42 flax-spinning mills, as I am informed, since the great wage dispute which led to the closing of the Messrs. Marshall's Mills, these have dwindled to two, much of the yarn now used being imported from Ghent and other centres. This illustrates how deadlocks of this description, stopping an ordinary channel of trade, give opportunities for keen competitors to come in and establish a commerce that cannot afterwards be diverted when the original dispute may be settled, and so a district may totally lose an

industry for lack of conciliatory handling. The most noteworthy feature, however, of the wet spinning in Yorkshire and Scotland is that the frames are fitted with "splash-boards," so as to effectually intercept and carry off the spray from the spindles, consequently the workers are kept dry as well as the floors, and work is carried on with more comfort as well as more cleanliness. It seems remarkable that any wet spinning frames should be without such appliances for these reasons, and even apart from any hygienic considerations. Owing no doubt in great measure to the absence of the large evaporating surface given by a wet floor, I did not find the amount of humidity in the air so great as in the Irish mills, the highest rated being as under :—

Dry bulb Fahr.	Wet bulb Fahr.	Per-centage of Saturation.
68°·5	67°	91
73°·5	72°	92·5
75°	73°	89
73°·5	70°·5	84

In these instances there was no mechanical ventilation, and the trough covers allowed the escape of much steam.

In the wet-spinning rooms of Messrs. Baxter Brothers, Limited, Dundee, the trough covers were of metal. They appeared to fit closer, consequently to permit less escape of steam into the rooms, and to be less likely to get out of repair than the wooden lids in ordinary use.

In the course of a conversation with Mr. J. Smith, of Dysart Mill, on the saturated atmospheres of coarse spinning rooms in Ireland, he informed me he had at one time managed a mill there and dealt with the difficulty. I may quote from the letter he wrote me on the point at my request, "The room referred to was one in which the very coarsest "numbers of wet spun yarns were made. In certain conditions of "weather I have seen the room so filled with steam that it was "impossible to see from one end of the frame to the other, in fact, one "could scarcely sometimes see even the girls working at the frames; "when in this state there was a very large quantity of waste made. "Having noticed that on a clear day, when there was plenty of sun-"shine, there was scarcely any steam in the room and that the work "went much more smoothly, I came to the conclusion that if the "temperature could be kept uniform, and as little steam put into the "room as possible, all would be right and adopted the following plan "with perfect success. I carried two rows of 4½-inch steam pipes "along the bottom and top of two adjacent sides of the room, and used "the condensed water from these to heat the water in the hot water "troughs: this arrangement kept the room at uniform temperature, "and also did away with the heating of the troughs by steam, as the "water from the pipes was sufficiently warm for this purpose."

The value of this experience lies in the fact that it was found possible to dispense with the high temperature steam blowing in quantity into the troughs, which causes the saturated and oppressive atmospheres observable in most coarse spinning rooms of Irish mills and that it thus points to the possibilities of practical improvements.

Wet Spinning Rooms (Ireland).

There is little to add to the details given in regard to these in Belfast, the hygrometrical conditions being precisely similar.

The Bessbrook Company's mills near Newry, I was glad to find, are fitted with "splash-boards," and Mr. Andrews, the spinning manager, courteously forwarded me a diagram of these, showing the position in relation to spindles. As some doubts were expressed to me as to the

willingness of the workers to have these splash-boards applied and the difficulties of cleaning, &c., it will be apposite to quote Mr. Andrews' opinion and experience. He says, "the cleaning is done simply by the " girl walking from one end of the frame to the other, and running her " hand along to gather the waste; this is only the work of a moment " and entails no extra labour on the girl. If one of our splash-boards " happens to get broken the girl is always complaining of the wet, and " is most anxious to have it on again, and on our very fine frames we " thought to do without them, but the girls themselves came and asked " me to get them on. 'Cleaning' is about four times a day for fine " work and six times for coarse." No one contrasting these girls working in dry clothes and dry footed with the draggled discomfort and always wet feet of those in other mills, can be surprised at their anxiety not to be without these splash-boards.

I learnt from an interview with Mr. Combe, of the celebrated machine-making firm of Combe and Barbour, that most of their spinning frames for export are invariably fitted with splash-boards, which are compulsory in Austria, and required in most foreign countries, and this agrees with information derived from another source that they are usual everywhere in all the mills my informant has visited. It is very desirable they should be compulsory here, wherever the arrangement of the machinery will admit. This depends on the "pitch" of the room, that is the distance between the columns. The frames are erected opposite the piers, so that the alleys may be opposite the windows for the maximum of light; hence it will be easily perceived that the frames cannot be re-arranged, while where the columns are too close there is not room for the splash-boards and for the free passage of workers at adjacent frames. Having gone carefully into this point and the necessary measurements, I am of opinion the compulsory rule should apply in all cases where the distance is not less than 4 ft. 6 ins. from the axis of the spindle on one frame to the axis of the spindle on the next frame. Allowing each splash-board a distance of 9 inches from the axis of the spindles, which is ample, there will be a free space of 3 feet, which is sufficient for all practical purposes. The profile diagram Fig. I. in the Appendix is the new form of splash-board for the Bessbrook Company, forwarded by Messrs. Mackie and Son, of Belfast, who have also sent me a section of the thin rolled steel "board" itself. Fig. II. is a small sketch of the moveable splash-board in use at the Kilbirnie Mills of Messrs. Knox; and Fig. III. the ordinary wooden splash-board in use at Messrs. Briggs, of Leeds.

Dusty Processes.

"Dry Spinning Rooms," "Roughing," "Hand-hackling," and "Sorting Rooms," "Machine Hackling Rooms," "Preparation and Card Rooms."

These may, for the Report, be grouped together as their special features have already been described in regard to Belfast, and while in Ireland they are much alike in all places, in Scotland, with a very few exceptions, the dusty conditions are generally worse, partly because the mills are old with low rooms, but also because it is quite unusual to find anything like an extracting fan used to diminish dust or to improve ventilation.

From the mode of handling the flax in Scotland, where it generally goes direct to the hackling machine without the preliminary stage of "roughing," &c., there are not many roughing rooms, but those there are urgently require to be dealt with as already suggested. As Russian

flax is mostly used for the class of yarns required, and it is complained that this arrives in a dirtier state each succeeding year, it may well be supposed that the hackling involves a considerable amount of dust. Some idea may be formed of the quantity given off from the fact that in the case of the hackling room at Kirkham (Lancashire), shown in Diagram V., which is fitted with three 24-inch Blackman fans, and about 90 feet × 30 feet, the settling room above it of the same dimensions after eight weeks' work contained fine dust to an average depth of ¾ inch covered with fine fluff from 2 inches to 5 inches thick.

The card rooms also are extremely bad; in Montrose, where I visited the room about 20 minutes after the dinner-time, it was then hardly possible to see further than the third carding engine (there were 12 or 13), and the women were already covered with dust; the state of things was nearly as unsatisfactory in Arbroath and Aberdeen.

In Scotland many of the card-room hands wear a small kerchief on the head, tying the ends over the mouth sometimes, but it is not fitting or necessary that such an atmosphere should be permissible in any workroom, I have satisfied myself, from observation and inquiry, that the 18-inch fans have not enough power to deal with a card room satisfactorily; it is desirable to use either 30-inch or 36-inch fans, as shown in the Diagrams IX., X., and XI. The hackling machines in Scotland are frequently tended by females; in Dundee, at the mills of Baxter Brothers, the dust from these machines seemed materially lessened by covering in the "sheet," as it is called (the endless carding strips that revolve). An effective mode of exhausting the dust from drawing frames was in use at Ward Mills (Dundee), *see* Diagram VI., though the use of "blowers" instead of fans demands a larger expenditure of driving power. Here the heavier dust gravitates into the outside hopper, while the lighter particles are blown away. But as other preparing machinery is in the same room, for which provision is not made, floating dust was still apparent.

Except in cases where dust is to be drawn downwards, trunks and hoods are not advisable as a general experience, a free fan will effect more than one enclosed in a tube, added to which bends and angles lessen the power, and in the case of fibres increase risk of fire.

Objections are raised to making the use of respirators compulsory for adult workers; but in my opinion for children and young persons they should be a condition of employment, as they can be very simply and cheaply constructed, since an elaborate appliance is not necessary as with poisonous dust.

In answer to inquiries as to their actual experience of the ailments of flaxworkers, and whether they had personal knowledge of cases where ill-effects were ameliorated on cessation from the work, and returned on its resumption, I have received from the various certifying surgeons the following replies:—

Dr. Keith Anderson, of Arbroath, writes: "I find that emphysema " and chronic bronchial catarrh are of constant occurrence among those " adult workers who have to deal with flax in the early stages of its " manufacture, viz., flax dressers and tow mill workers. Boys engaged " at the hackling machines do not suffer from these complaints, pro- " bably because they have to adopt another calling as they grow up, " and weavers only after spending many years in the factory.

"I do not find that consumption is more common among textile " workers than in other classes of the community.

"Over one-third of the total deaths in Arbroath are due to diseases " of the respiratory organs. The Registrar-General's returns for " 1892, are as follows :—

" Population 23,151, total deaths 368 (1·580 per cent. of the population); deaths from the respiratory system, excluding croup and " laryngitis, 128, or ·553 per cent. of the population, or 34·780 of the " total deaths."

Dr. Sneddon, of Cupar Fife, writes: "I have not the slightest doubt " of the ill-effects of the dusty processes in flax mills in inducing and " encouraging diseases of the respiratory system, particularly phthisis. " In proof of what I state, I append notes of cases.

" 1. K. H., aged 18, female, flax spinner, well-nourished, strongly built, " seen first in November 1887. She complains of cough, and on inquiry " says she has been so troubled for three or four months, and is worse " when at work. Night sweating is occasionally troublesome, but not " markedly so. There is no family history of phthisis, and no history " of any previous illness, &c. She was ordered rest from work, with " suitable diet, medicine, and change of air; she rapidly improved, " and after two months resumed work, feeling quite well, and on " examination showing no signs of lung trouble beyond a slightly " harder breathing under left clavicle as compared with the right. Six " months after she again complained of cough and loss of flesh. Consolidation was more marked, breath sounds over left apex harsh, and " broncho-vesicular in type. Advised to leave her work, and on " recovery after rest and change became a domestic servant. Is now " married, and as yet has shown no signs of recurrence to former " trouble."

2. J.B., aged 22, male, flaxhackler: " Badly nourished, and emaciated " looking, complained in summer of 1888 of cough, shortness of breath, " and night sweatings, which latter were sometimes profuse. The " sputum profuse and muco-purulent. No hereditary tendency to " phthisis and no history of former trouble beyond a slight cold now " and again. On physical examination all symptoms pointed to incipient " phthisis affecting both apices. Cod-liver oil, fresh air, good food, " and rest from work quickly produced a marvellous change for the " better. He returned to work four months after in quite a plump and " healthy condition, and no symptoms beyond a slight increase of vocal " resonance over left apex. After two months work, the symptoms " returned, and he quickly became very ill and quite unfit for work. " He rested awhile and then was advised to leave his work and get " some out-door occupation. This he managed to do, and, though he " never will be strong, he manages to get along without much trouble, " but I have not the slightest doubt that were he to resume his former " occupation the symptoms would return.

"I might easily multiply cases, but the foregoing, with others of a " like nature which have come under my notice, seem to prove that " working in flax may both induce and encourage phthisis.

" I have also noticed that many flax dressers and spinners die with " symptoms of phthisis between 50 and 60. In one family of four " females with no history of phthisis, all of them within the last six " years have died of phthisis, the oldest of the four only 62 years of age. " In all these four cases there were accelerating causes of death, but " the main trouble was phthisis.

" Bronchial catarrh I find very common among workers in flax. " When bronchitis occurs it is usually very acute, and deaths about the " ages of 40 and 50 are not uncommon. Laryngitis is a frequent

" source of trouble, and when once started seems to recur with great " frequency.

" The diseases I have mentioned are those most commonly found, and " it has often occurred to me that something in the nature of fans, or " other apparatus for causing draughts, and allowing of a more com- " plete ventilation, might improve the hygienic aspects of flax mills."

Dr. Will, of Aberdeen, states: " After a long experience of flax mills, " I have seldom had an employée the subject of phthisis. A number, " however, have suffered from bronchitis, notwithstanding that our " workrooms are large and admirably ventilated; besides every means " have been used for carrying on the work with the least risk to the " health of the workers."

Dr. Key, of Montrose, says: "In my opinion and experience the " dusty processes do not tend to induce phthisis. But I am satisfied " that the dust generated in these works does produce bronchitis, which " in the long run assumes a chronic character, and after a time in most " cases is complicated with emphysema."

Dr. Lunan, of Blairgowrie, writes: "I cannot say I have been able " to trace the origin of phthisis to flax dust. I feel quite sure that " bronchial catarrh, accompanied in many cases by asthma, is frequently " caused by breathing the dusty atmosphere of flax mills. Elderly " persons, and those who have a predisposition to bronchial affections, " almost invariably suffer from some form of bronchial affection while " they continue working in a flax mill. Hacklers and others employed " amongst flax suffer more than those employed amongst tow."

Dr. Campbell, of Dundee, writes: "Our flax mills are very limited, " but in those we have, I have no hesitation in saying that the dusty " processes tend to a considerable extent to develop phthisis, and " especially chronic bronchitis, with heart complication. During " 23 years I have noticed this, and more particularly in what is termed " the tow mill."

Dr. Miller of Dundee, writes: " My opinion is, that there is reason " to doubt that the dust of the flax mills exercises any considerable " influence in giving rise to phthisis or other lung diseases. Even were " it proved that work in the preparing flats of flax mills furnished a " larger proportion of phthisis cases than other employments, I would " not conclude that the dust was the cause. For these workers are the " least skilled and the lowest paid, and as a rule are drawn from the " poorest grade of the people, and are consequently more exposed to the " combined influence of insanitary houses, bad and insufficient food, and " scanty clothing, more potent causes for evil, one can scarcely doubt, " than the dust. Looking in at one of these dust flats while work is " going on, the impression given is certainly that the occupation must " be a very unhealthy one. This view, however, does not appear to be " supported by facts.

" Although aware that a single enquiry does not carry much weight, " I visited the medical wards of our hospital to ascertain what propor- " tion of the phthisis patients in the house had been engaged in this " sort of work. Among the 79 medical cases there were 13 cases of " phthisis, the ages ranging from 18 to 59, and of the 13 patients 7 had " been employed in the dusty departments of flax and jute factory " work.

" Notwithstanding, however, my doubt as to a decided injury from the " dust, I think that thorough ventilation should be insisted on, and that " the workers should be urged to wear, as some of them do, a thin pro- " tector of some suitable material over the mouth and nose."

In a second communication Dr. Keith Anderson, of Arbroath, adds: "I can testify that I constantly observe in cases of phthisis and chronic "bronchitis, a marked improvement in the symptoms coincident with "the patients leaving the mill; this improvement coming to a stop at "once on the resumption of work. I have delayed this note for several "days in order to take the opinion of some of my fellow practitioners in "the town, and I find that their experience agrees with mine."

Dr. St. George, of Lisburn, who is also surgeon to the Antrim Infirmary, writes: "I find that a large number of hacklers and roughers "among males, and carders among females, suffer from phthisis, "bronchitis, and asthma due to the irritation caused by the particles of "flax being carried into the lungs and causing mechanical irritation. In "the wet spinning rooms a number of the spinners and doffers suffer "from rheumatism, caused by their having to stand in the warm, damp "surface water in their naked feet, and there is also a good deal of "anæmia among young girls from the heated and vitiated atmosphere."

Dr. Palmer of Newry, Co. Armagh, writes: "After mentioning the "liability of workers in scutch mills to mill fever, and its recurrence. "From what I have observed in the spinning and carding rooms, as "well as information derived from patients who have consulted me, and "from the deaths registered in my capacity as Registrar of the district, "I am of opinion that the hot spinning rooms are a fruitful cause of the "development of pulmonary consumption, bronchitis, and other chest "diseases. This, I believe to be due to the sudden changes from hot "to cold atmospheres that they are subjected to at least three times in "the day, viz., at breakfast, and dinner hours, and in the evening when "they leave off work. Bronchitic cases, are, as a rule, improved, but "not cured by leaving off work, and the disease is aggravated by "returning to the unhealthy conditions. The phthisical cases rarely "return after leaving off work; they usually go from bad to worse till "death end the scene. I should mention that I am of opinion that a "large proportion of the employées are as healthy and seem to enjoy "their work as much as farm labourers. The carding rooms are also a "cause of chest diseases, but not such a large proportion as the spinning "rooms. In the spinning rooms there is, I believe, a larger proportion "of young girls and boys employed than in the card rooms; this may "be, and very probably is, a factor in the phthisical cases, as the girls "and boys are subjected to unhealthy conditions at a critical time of "their life. Weaving is not, so far as I can ascertain, unhealthy."

Dr. Boyd, of Lifford, Co. Donegal, says: "I have seen some cases of "lung disease which I attributed to working in flax mills, but, taking "into consideration the numbers of workers there are in this neighbour-"hood and the character of the work, the cases are very few indeed; "in my opinion, where the disease developed is of a phthisical nature, "the leaving off work makes no improvement; but in cases of bronchitic "disease there is for the time being, but it is brought on again by the "resumption of work."

Dr. Taylor, of Tanderagee, Co. Armagh, writes: "In my experience, "extending over 14 years, I have never noticed any special ailment "attributable to employment at the flax industries here among those "employed at them."

Dr. H. S. Purdon, of Belfast, says: "Phthisis, arising in the first "instance from inhalation of vegetable dust causing 'mechanical bron-"chitis,' eventually ending in consumption, is our most common disease. "Especially is this the case as regards workers in carding rooms and "hacklers. Machine boys are very liable to 'mechanical bronchitis,'

"and in summer often seek employment in brickfields, so as to be out "in the fresh air. Females employed in spinning rooms are liable to "varicose veins in legs, often producing again eczematous eruptions by "going barefooted both at work, and when returning from or to work, "especially in cold weather.

"Onychia or inflammation of matrix of nail, especially that of great "toe, is occasionally met with. Formerly—some 25 years ago—this "disease was very common, but since most of the workers put on boots "on leaving work it is now greatly on the decrease. Young girls, 15 "to 19, both in spinning rooms and weaving factories, are liable to "anæmia or bloodlessness."

Dr. Dickson, Ballynahinch, Co. Down, writes as follows: "The "special ailments I have met with in factory workers are connected with "the respiratory organs, and arise more from dust than damp. "Bronchitis and bronchial irritation in various degrees are the form of "disease I consider directly attributable to the work, and these "may lay the foundation for more serious diseases as consumption and "hemorrhage. Again and again I have got workers to give up dusty "departments with marked benefit, and found on their return to their "former work a renewal of their old malady."

In a subsequent letter he adds, "I think if the dust fans, which have "been erected in some spinning mills, were made compulsory, not only "in spinning mills, but also in all scutch mills, it would be a great boon "to the workers and save many of them much suffering and premature "death."

Dr. R. H. Newett, of Ligoniel who is dispensary medical officer, besides certifying surgeon, after commenting on the markedly improved atmosphere where fans have already been introduced with a corresponding improvement in diminishing dust trouble, continues, "every industry "is attended with dangers to life and to health, more or less peculiar to "itself. Among those incidental to flax spinning may be mentioned "phthisis, bronchial affections, and among young females of 17 years "and upwards anæmia; this ailment is an occasional cause of refusal of "certificate in the case of girls about 14 years. I meet with very few "cases of acute rheumatism, and only a few of muscular or chronic "rheumatism. My own opinion is, with which my neighbour "Dr. Mulligan agrees, that the cases we see cannot be referred to "conditions affecting the flax industry as causes. With regard to cases "of chronic bronchial ailments, they are benefited by temporary cessation from work, but relapse more or less on its resumption. Several "years ago onychia was prevalent among workers in wet spinning "rooms; we never see it now. I cannot account for this, as I am "informed no change has taken place in the conditions of work." (Dr. "Purdon supplies an adequate reason.) "Albumenuria is very prevalent amongst the workers; it cannot be referred to the industry as "a cause. The wet clay soil, wet atmosphere prevalent at times, bad "habits as to clothing, intemperance, and insanitary dwellings are the "causes."

Dr. Alex. D'Evelyn, of Ballymena, Co. Antrim, after pointing out the dustiness, and absence of mechanical ventilation in scutch mills, says, "With regard to the preparations for spinning, the hackling, which is "done by hand, is the most deadly process, notwithstanding the fact "that there is generally good ventilation. The hacklers all die young, "and all suffer from chronic disease of the lungs, caused by the flax "dust or 'pouce' as it is locally named. Many of these men succumb "to cirrhosis of the liver, or to disease of the kidneys, but this is partly "due to the amount of raw alcohol which they consume. The first

"thing a hackler does each morning is to drink a glass of raw whiskey, "to clear out his bronchial tubes, otherwise he is unable to breathe. "After a day off, the men have often told me that their breathing is "worse. In the machine hackling and other preparing rooms which "are dusty the workers suffer more or less from lung trouble, but as "they are generally young persons or children, I do not meet so many "cases of disease among them."

"In the damp processes, such as spinning and weaving, many of the "workers contract consumption, but this I consider is due to a great "extent to the fact that they go straight from the warm, moist air of "the spinning room or weaving shed into perhaps a cold, frosty air "outside, without any additional clothing, excepting perhaps a light "shawl. In conclusion, I may safely say that all the workers in our "flax-spinning mills suffer in some degree from lung trouble due to the "'pouce.' In some cases it does little harm, but in others it causes "congestion of the lungs, and if the person so affected continues in the "dusty atmosphere it leads most certainly to a form of phthisis or "consumption."

Dr. Dougan, of Portadown, writes:—"I have frequently had cases of "pulmonary disease, which I attributed to bronchial irritation from "dust, and I have seen persons suffer from ulcers on the legs and feet, "especially the toes, from damp. However, everything considered, "they are wonderfully healthy in my district."

The general consensus of these opinions appear to justify and corroborate the inferences already drawn, particularly in regard to the dusty employments, which can undoubtedly be much ameliorated by the adoption of judicious and adequate methods, some of which are shown in the appended diagrams, and these qualifications are added designedly, because instances of their opposites have come under my notice where there has been clear desire to have the best results, for there is no doubt that the employers are, as a body, anxious to improve the conditions under which work is carried on for their own advantage as well as for the welfare of their people.

It is quite possible that large modifications of existing conditions may and do give rise to cavil and objection, but it is my experience that when they have been carried out objectors are often the readiest to acknowledge the practical advantages. This I feel certain will be the case with regard to the use of "splashboards" in the wet-spinning rooms, and the diminution of dust in other processes. But it must be borne in mind that in treating textile fibres for manufacturing purposes some amount of dust is unavoidable: hence when the employers have done what lies in their power it would also seem right and reasonable that the workpeople themselves should exercise a contributory care of their own health, and take such due precaution on their own behalf as lies within their power. The objection to wear respirators, as a case in point, is not creditable to their intelligence. If it were overcome, I do not think employers would be unwilling to provide them, nor would the expense be great in comparison with the comfort and benefit of immunity from distressing and often permanent forms of disease. Though these are days of abundant peripatetic philanthropy, woman's duties in such cases appear to have escaped attention. They might perhaps fairly engage the efforts of local ladyhood. The simplest form of appliance would be effective, two folds of muslin, with a removable layer of cotton wool between, kept away from the mouth (to avoid saturation) by a light wire concave oval, would answer every practical purpose, and be within the power of any ordinary needlewoman to contrive and keep in order, and so far as appearance constitutes an

existent objection, feminine instincts might be trusted to arrive at even a decorative result. But in any event it is desirable the respirator should become a strict condition of employment of children and young persons in what have been shown to be the dusty departments in the manipulation of flax fibre.

E. H. Osborn.

APPENDIX.

I.—Splashboard (Bessbrook Flax Spinning Co.), with section of new rolled steel "board."

II.—Movable splashboard (W. & J. Knox, Kilbirnie).

III.—Ordinary wooden splashboard (Messrs. Briggs, Leeds).

IV.—Improved method of removing dust from roughing room (York Road Mills, Belfast).

V.—Method of ventilating and removing dust from machine hackling room (Kirkham Mills).

VI.—Method of exhausting dust from drawing frames (Don, Buist, & Co., Ward Mills, Dundee).

VII.—Method of removing dust from roughing room (New Northern Co., Belfast).

VIII.—Same in section.

IX.—Method of ventilating and removing dust from card room (St. Mary's Flax Mills, Drogheda).

X.—Method of ventilating and removing dust from card room (Messrs. Lorent Lescornez, Lille, France).

XI.—Method of ventilating and removing dust from card room (Messrs. Cressy et Cie, Lille, France).

XII.—Method of ventilating and removing dust from card room (Black Forest District).

You added flax mills and linen factories to the list of dangerous trades, and approved of the following special rules:—

Factory and Workshop Acts, 1878 to 1891.

SPECIAL RULES.

Spinning and Weaving of Flax.

Weaving Sheds
(in which artifical humidity is produced).

Ventilation.

An efficient 14-inch extracting fan shall be provided for every 2,500 square feet of floor surface, such ventilation to be arranged to the satisfaction of the inspector of factories and to be kept in operation during working hours.

Splashboard of Rolled Steel and Bracket, for Wet Spinning Frames at Bessbrook.

as fitted by

J. Mackie & Son, Belfast.

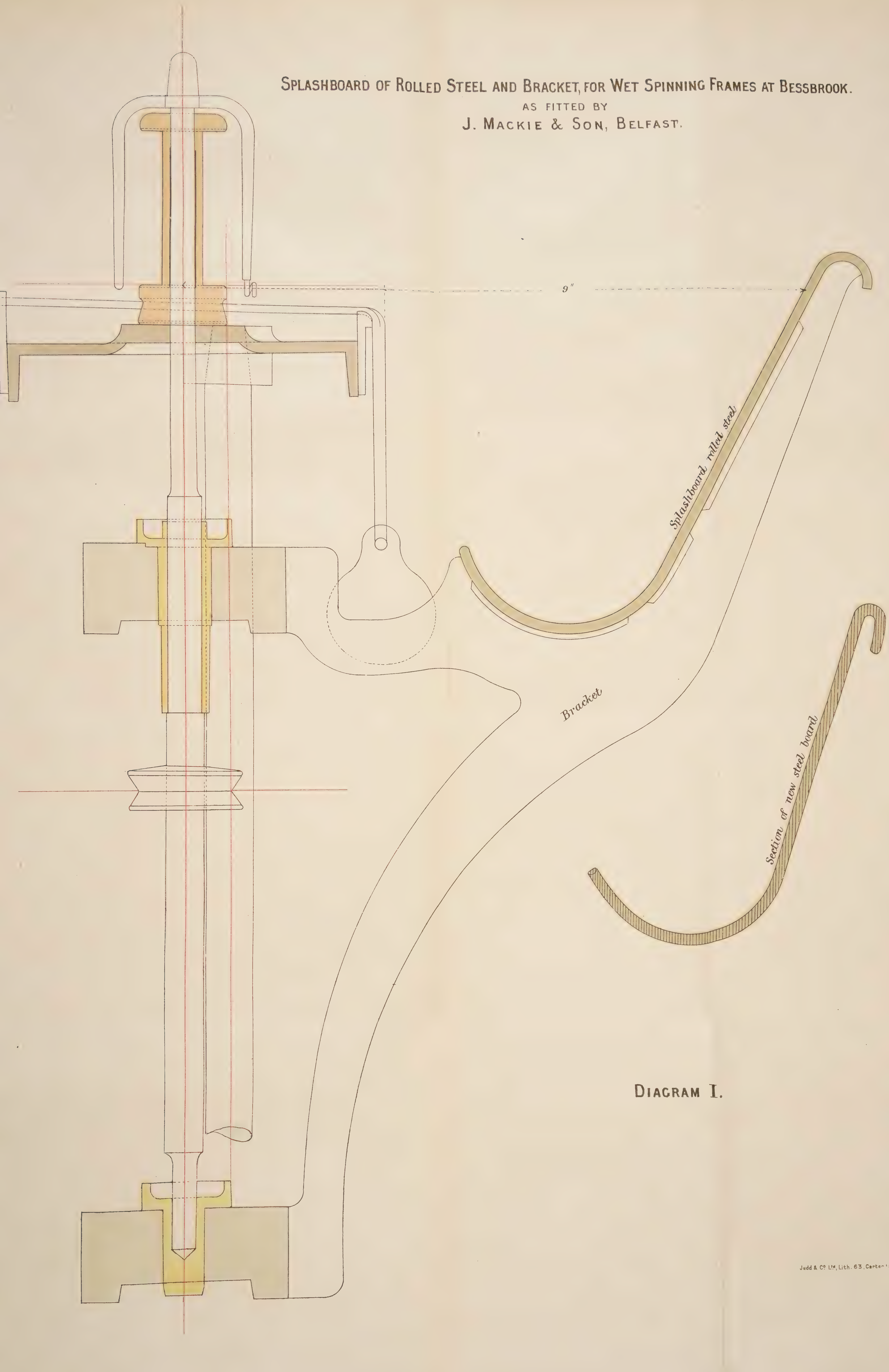


Diagram I.

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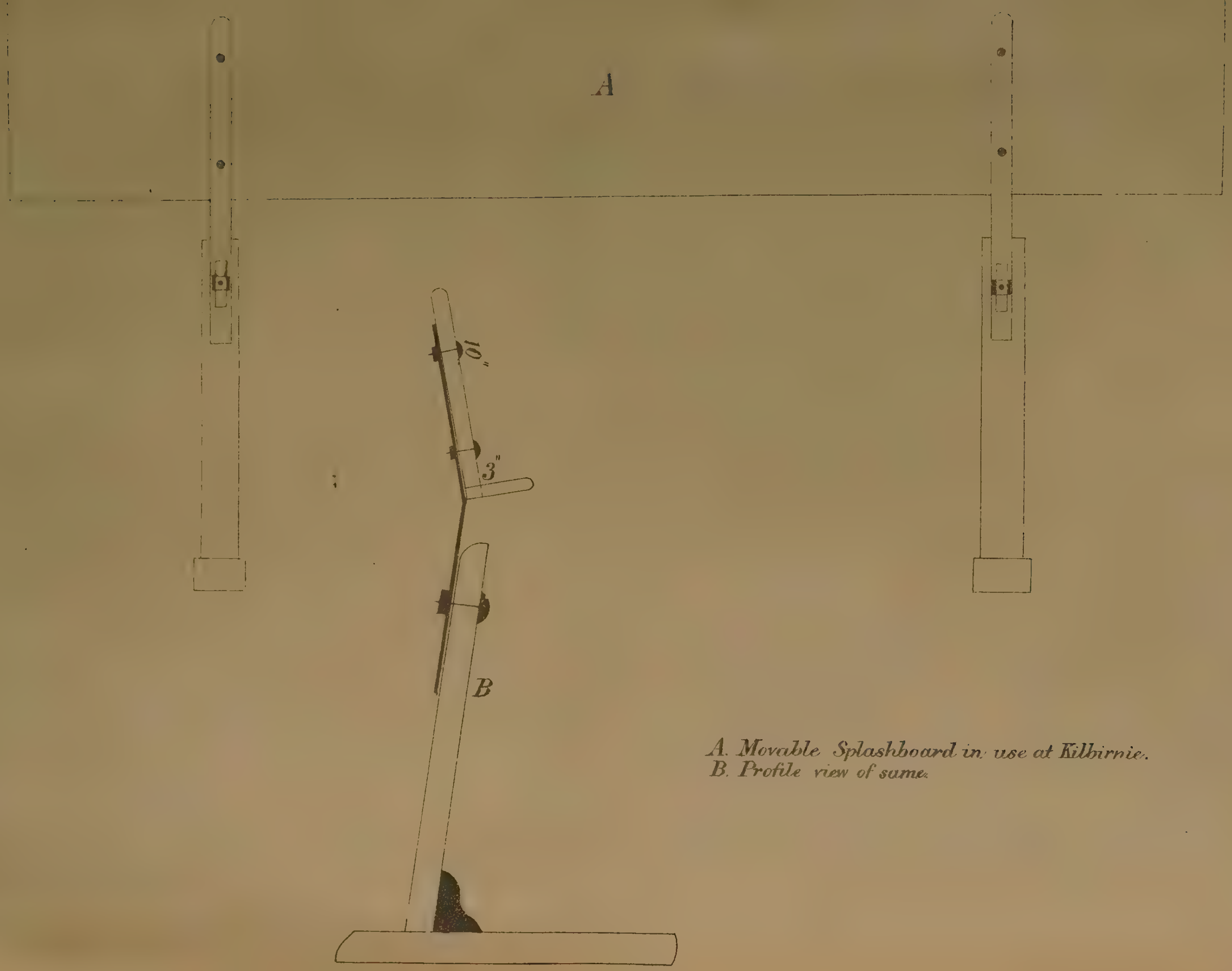

A. Movable Splashboard in use at Kilbirnie.
B. Profile view of same.

...dd & Co. lith.

— DIAGRAM III. —

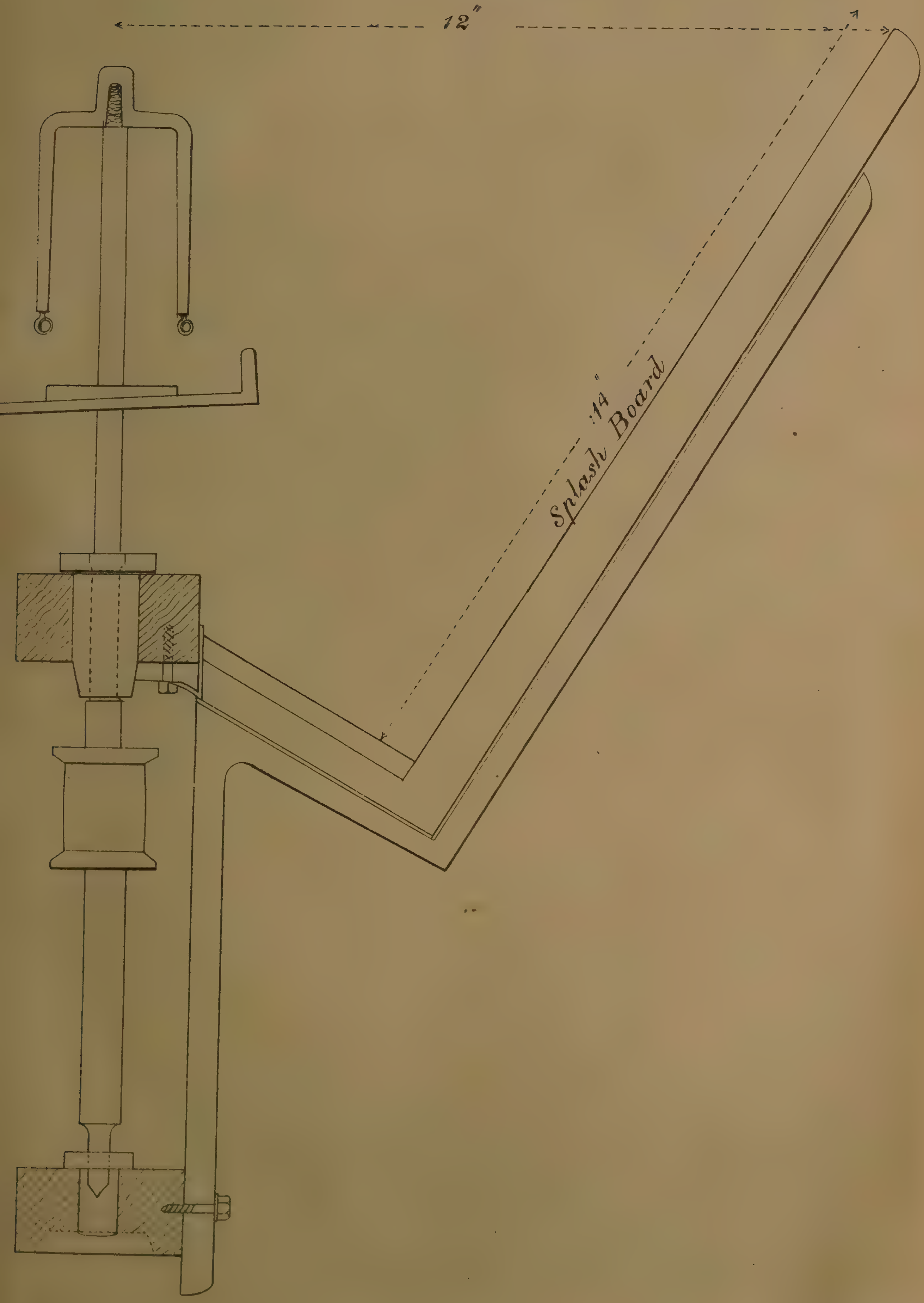

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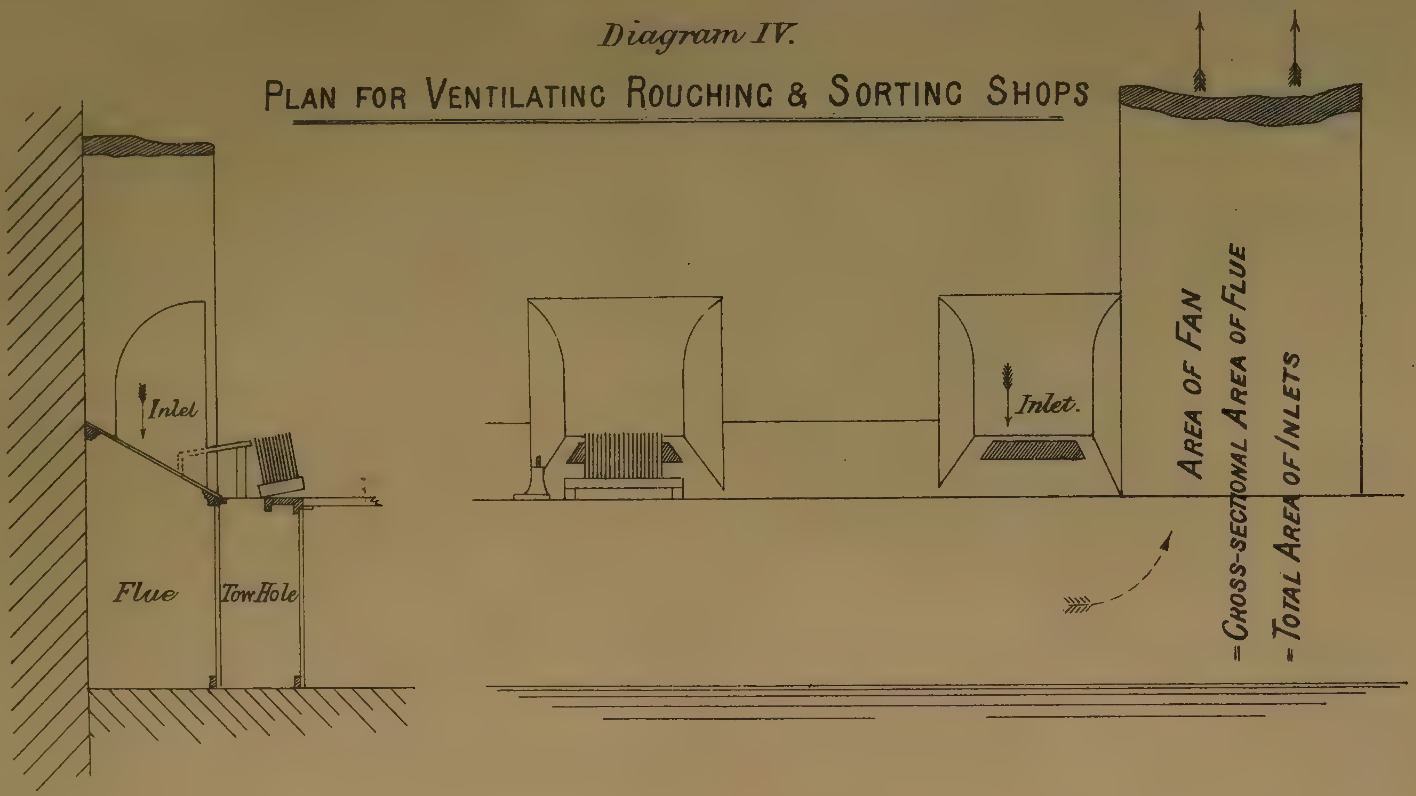
Diagram IV.

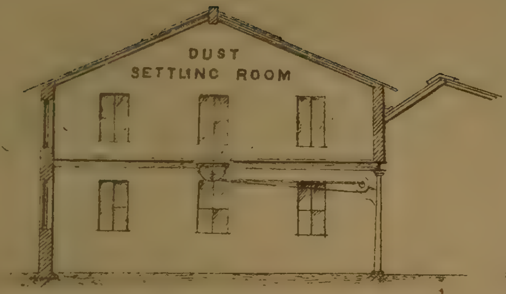
PLAN FOR VENTILATING ROUGHING & SORTING SHOPS



York Road Mills.

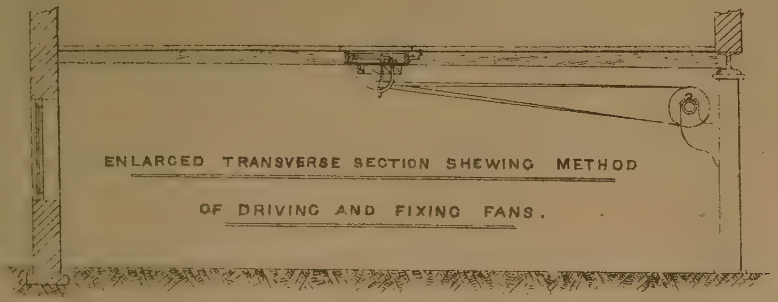
Judd & Co. Ltd., Lith. 63, Carter Lane, 5616, 1.84.

Diagram V.



TRANSVERSE SECTION

LONGITUDINAL SECTION



ENLARGED TRANSVERSE SECTION SHEWING METHOD OF DRIVING AND FIXING FANS.

ARRANGEMENT OF 3·24^{IN} BLACKMAN FANS FOR REMOVING DUST FROM HECKLING SHOP

—Diagram VI.—

—Method of Removing Dust from Drawing Frames at Ward Mills, Dundee.—

—*Scale 1½ ins — 1 Foot.*—

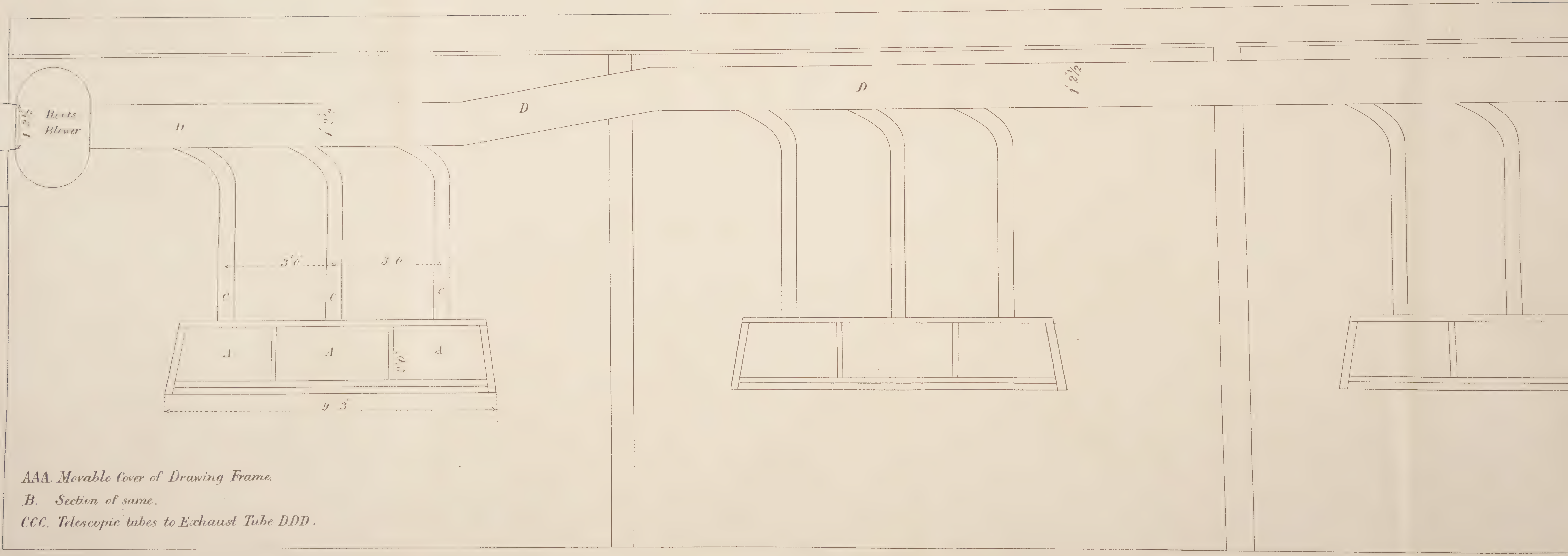
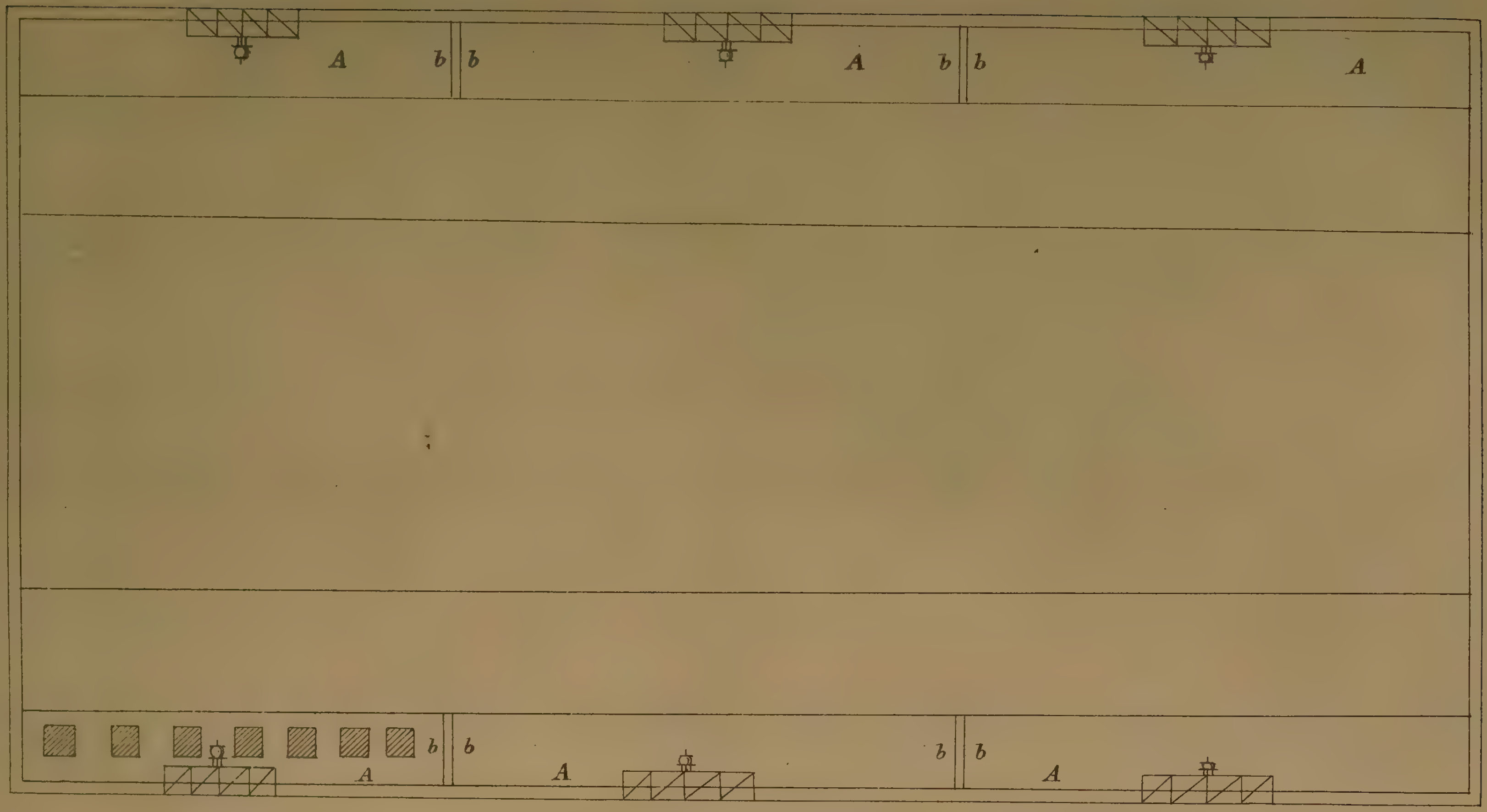


DIAGRAM VII



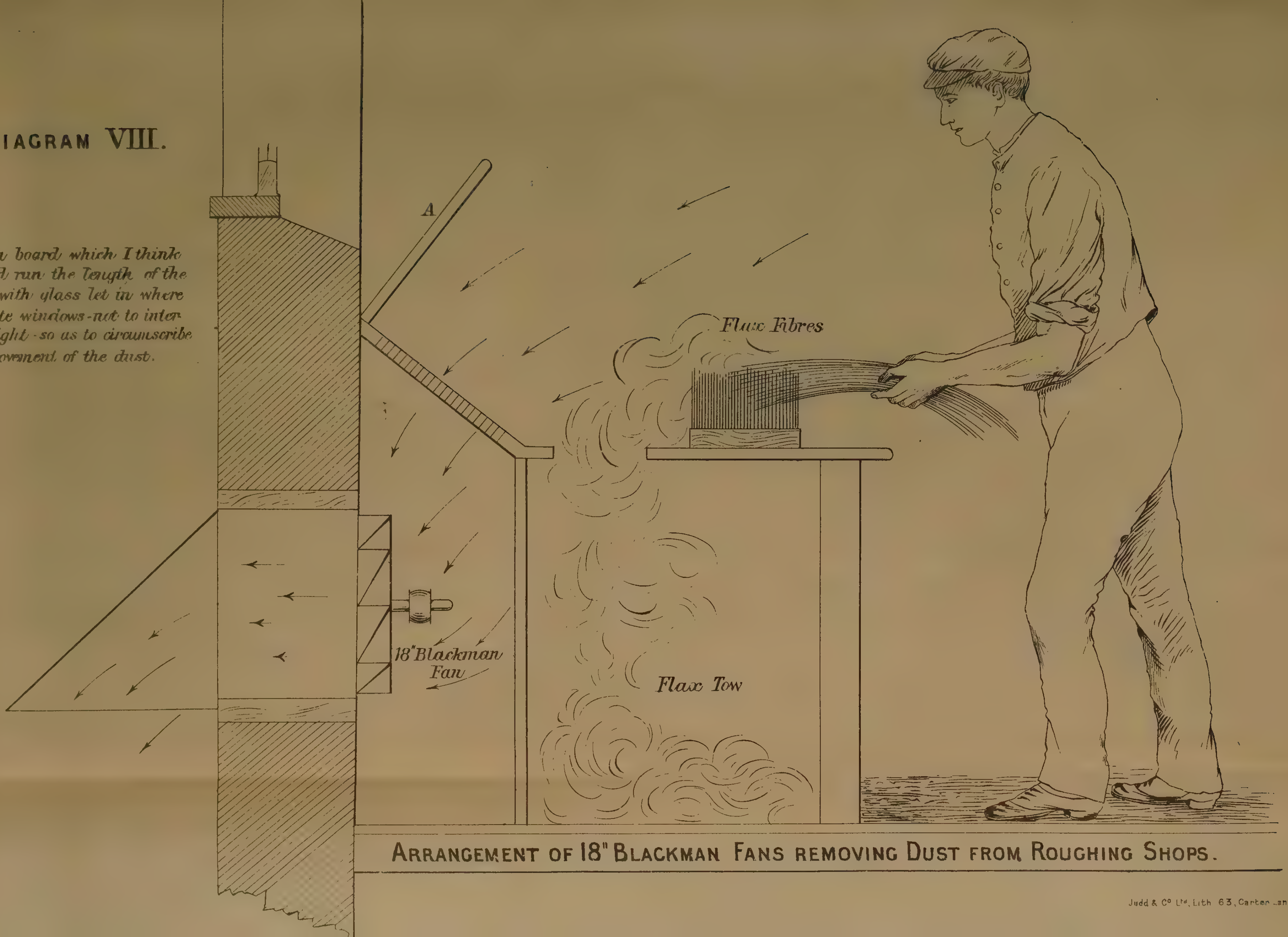
Proposed mode of extracting dust from Roughing Shop of New Northern Co's Mills, Belfast by 18" Blackman Fans. AAAAAA represents the exhaust trunk separated by bbbbbb, so as to give each fan an equal share of work.

Not to Scale

Judd & Co. Ltd, Lith. 63, Carter Lane, 5816.1.94.

Diagram VIII.

A is a board which I think should run the length of the room with glass let in where opposite windows—not to intercept light—so as to circumscribe the movement of the dust.

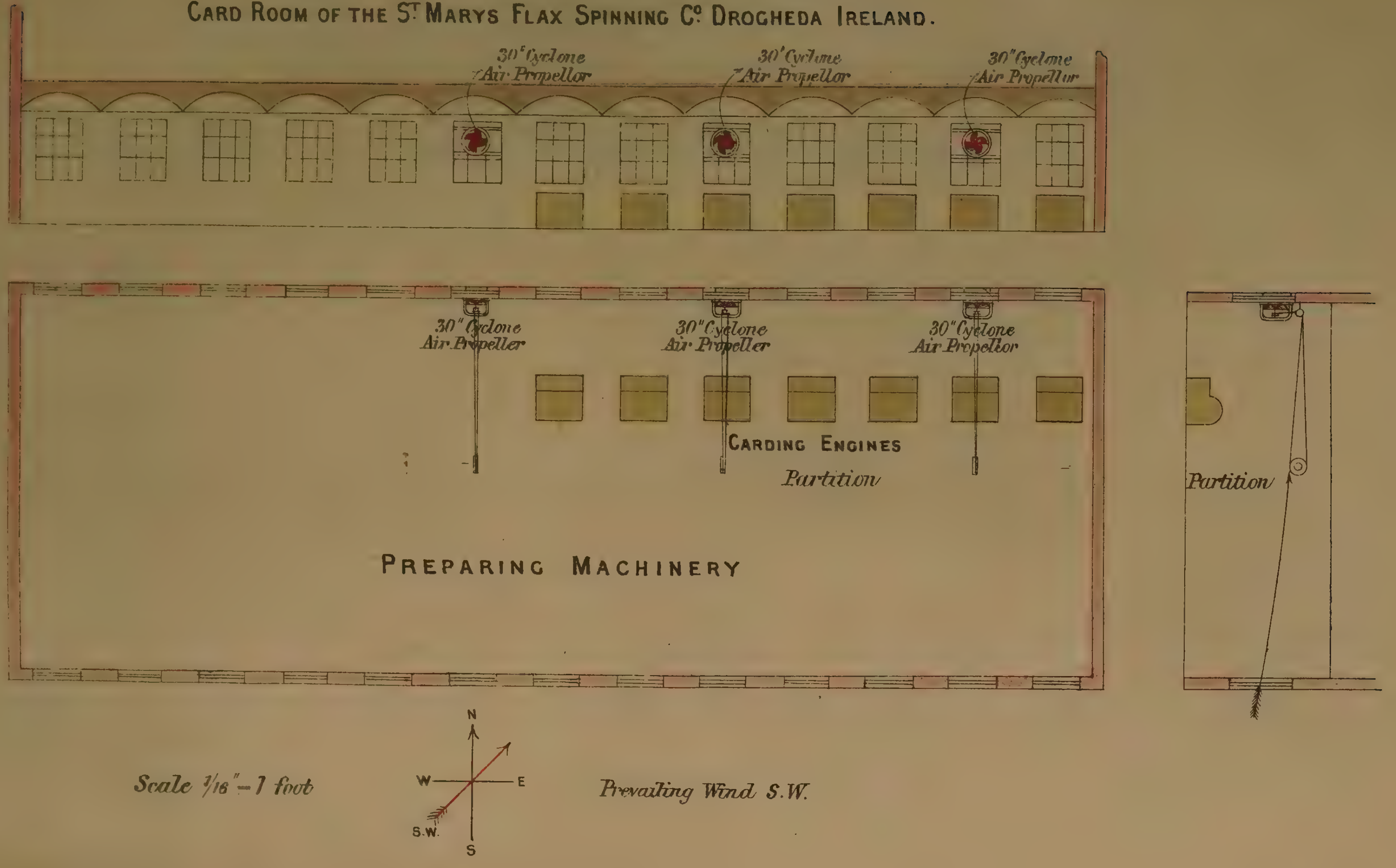


Arrangement of 18" Blackman Fans removing Dust from Roughing Shops.

Judd & Co Ltd, Lith 63, Carter Lane 5616·1·94

Matthews & Yates Ld. Cyclone Works, Swinton Manchester.

Card Room of the St. Marys Flax Spinning Co. Drogheda Ireland.



Scale 1/16" – 1 foot

Prevailing Wind S.W.

Judd & Co. Ld., Lith. 63, Carter Lane 5616·1·94

DIAGRAM. X.

—METHOD OF VENTILATING LINEN CARD ROOM BY THE "CYCLONE" AIR PROPELLER—

—ADOPTED BY MESS.RS LORENT LESCORNEZ LILLE, FRANCE.—

— *Scale 1/4 inch = one foot.* —

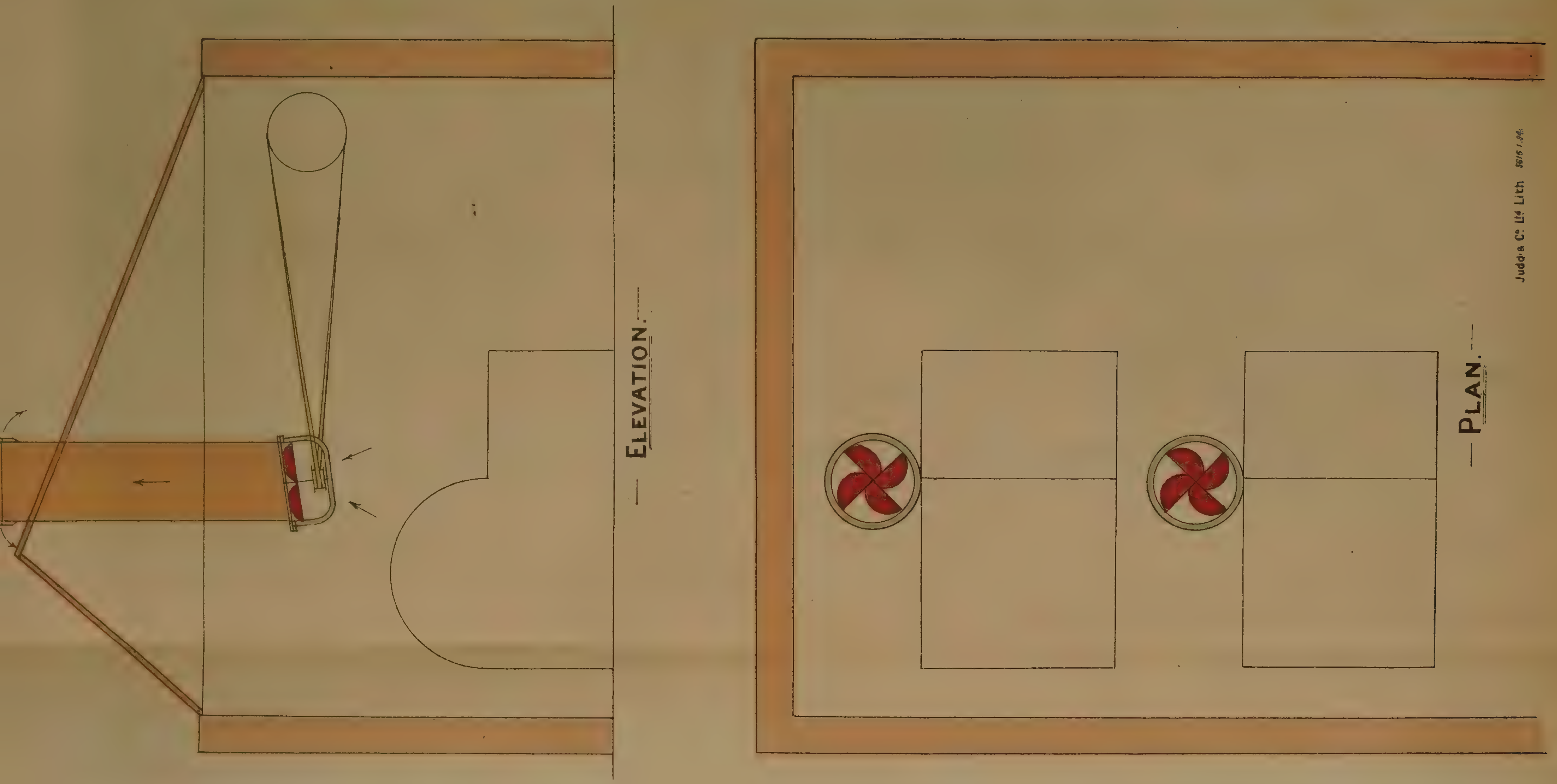
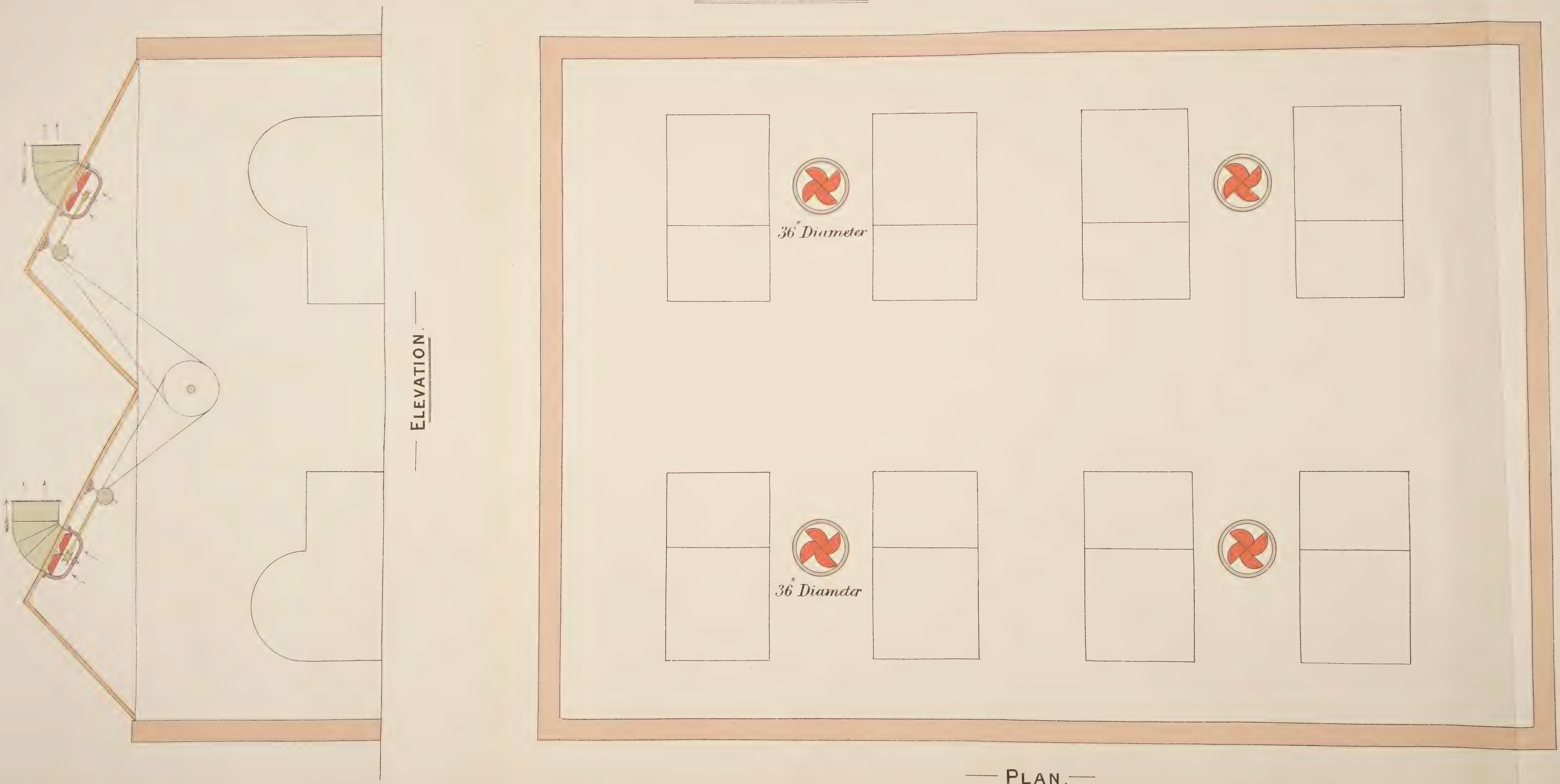


DIAGRAM XI.

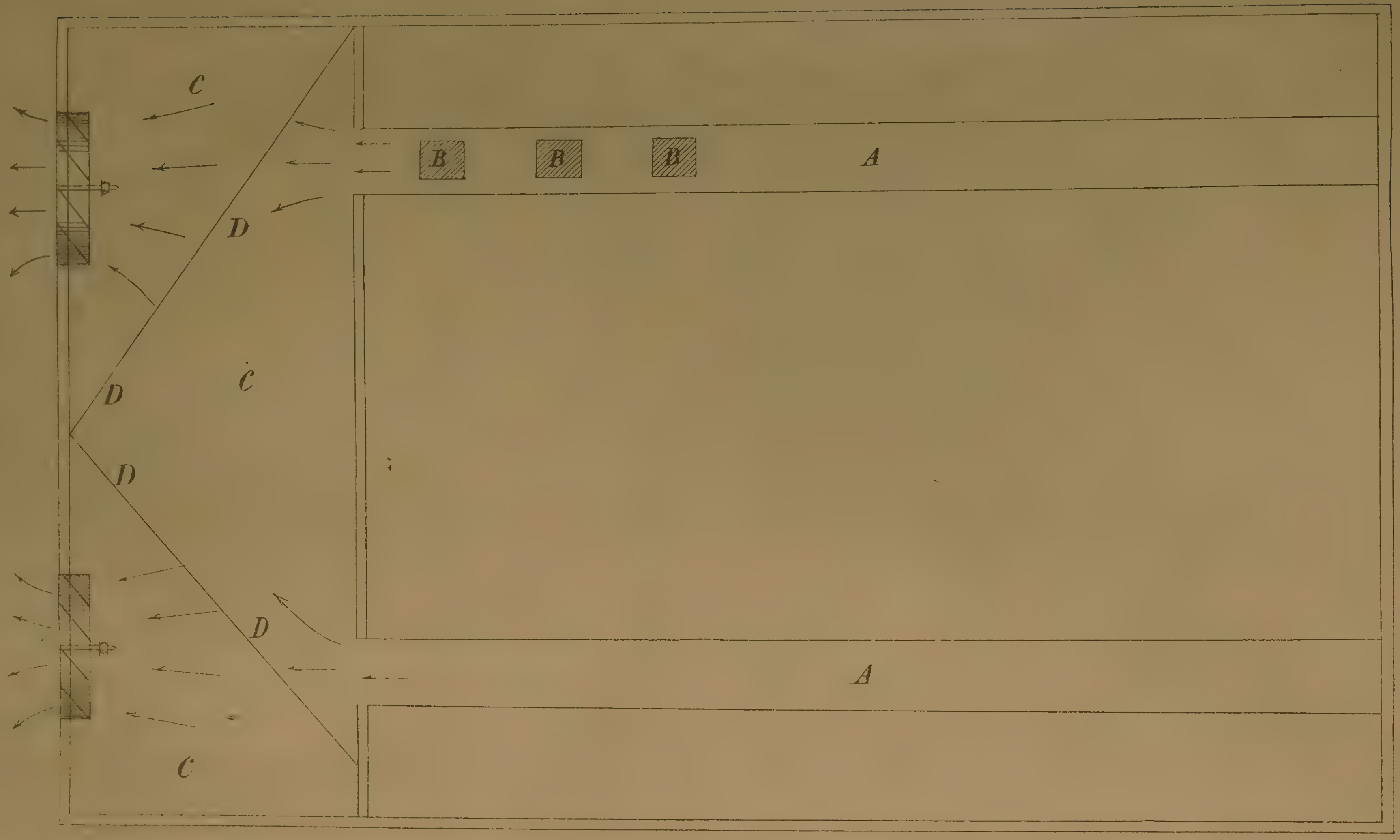
PLAN OF VENTILATING CARD ROOM BY THE "CYCLONE" AIR PROPELLER ADOPTED BY MESSRS. CREPY AND Co. LILLE, FRANCE.

Scale ¼ inch = one foot.



PLAN.

Judd & Co. Ltd., Lith. 63, Carter lane, 5616.1.94



Rough Plan of good mode of Ventilating Card Room (from the Black Forest.)

AA ducts under floor. BBB openings in ducts one below each Carding Machine.

The air exhausted by the two 48" fans shown, draws dust into chamber C C C.

DDDD are two fine wire screens, which permit dust to pass through, retaining fibre in triangular position.

Judd & Co Ltd, Lith. 63, Carter Lane. 5619.1.94.

Humidity.

In every weaving factory where artificial humidity is produced, there shall be provided, maintained, and kept in correct working order two sets of standardised wet and dry bulb thermometers. A difference of at least two degrees shall be kept during working hours between the wet and dry bulbs (*e.g.* Dry Bulb 75, Wet Bulb 73).

(1.) One set of thermometers is to be fixed in the centre and one at the side of the factory, or in such other position as may be directed or sanctioned by an inspector of factories, so as to be plainly visible to the operatives.

(2.) The occupier or manager, or person for the time being in charge of each factory, shall read the thermometers twice in the day, viz., between ten o'clock and eleven o'clock in the forenoon, and between three o'clock and four o'clock in the afternoon, on every day that any operatives are employed in the factory, and shall record the readings of each thermometer at each of such times on a form provided for the purpose for each set of thermometers, in the form and in accordance with the regulations contained in Schedule B. of the Cotton Cloth Factories Act, 1889, and the readings indicated at any time by the said thermometers shall be taken to represent the actual humidity of the room at such time.

(3.) The form in which the readings of each thermometer provided for in sub-section (ii.) of this section are to be recorded shall be kept hung up near the thermometers; and after being duly filled up, shall be forwarded at the end of each month to the inspector of the district, and a copy shall be kept at the factory for reference.

Wet Spinning Rooms.

Spinning frames shall be provided with splashboards wherever the distance of the axis of the spindles on a frame from the axis of the spindles on the adjoining frame is not less than four feet and six inches.

Where splashboards cannot be provided from the above distance being less than four feet six inches, waterproof overalls or aprons shall be provided by the occupier for all the workers, such overalls or aprons to be sufficient to cover the chest in the case of children and young persons.

The lids of the troughs shall be kept in perfect repair to check escape of steam.

The same rules shall be adopted with respect to humidity as are required in the weaving sheds.

Wet Spinning Rooms and Weaving Factories.

Whenever steam is injected into any room, the pipes conveying the same shall be jacketed with non-conducting composition to the satisfaction of the inspector of factories.

Roughing and Sorting and Hand Hackling Rooms.

Exhaust fans shall be provided so as to draw the dust forward and down from the face of the worker.

Respirators shall be provided for the use of the workers, if children or young persons.

MACHINE HACKLING ROOMS.

Preparation and Card Rooms.

Exhaust fans shall be provided on the side of the room where the machines are, and inlets provided from 6 to 7 feet from the ground on the opposite side, unless some other arrangements of such fans shall be found equally effective.

Respirators shall be provided for the use of the workers, if children or young persons.

DRESSING ROOMS.

Dressing rooms must be ventilated so as to render harmless any gas, vapour, or other impurities.

R. E. SPRAGUE ORAM,
H.M. Chief Inspector of Factories.

xxiv.—*Factory Regulations in France.*

In the valuable report of the Departmental Committee of the Education Department attention is drawn to the provision in the factory laws of France that no person under the age of 18, "may " be employed in cleaning, greasing, superintending, or repairing " machinery in motion, or the transmissions of which are in " motion; in any work where the machinery is not properly " protected, or in unhealthy or dangerous trades. They may not " be employed in turning hand or foot treadle or horizontal " fly-wheels.

" Under 16 no child may turn a vertical wheel for more than " half a day with the rest of half an hour, or may work machines " with hand pedals, or circular or band saws, shears or other " mechanical cutting apparatus.

" Between 13 and 16 they may not carry more than a kilo of " molten glass. Nor can a child under 16 work a steam cock or " be employed on scaffolding. No girl under 16 may turn a " pedal sewing-machine with hand or foot.

" No female can be employed in setting up, or preparing " writings, prints, &c., *contra bonos mores.*"

xxv.—*Increased Powers to Secretary of State to make Special Rules to prevent Employment of Females and Young Persons in Dangerous Trades.*

The various departmental committees have drawn attention to the advisability of females and young persons under a certain age not being employed in certain parts of factories where dangerous trades are carried on, but the Secretary of State has no power at present to carry out such recommendations by special rules. It appears worthy of consideration whether such extended powers should not be given.

III.—COTTON CLOTH FACTORIES ACT, 1889.

Having received deputations from the North and North East Lancashire Cotton Spinners and Manufacturers Association, and

from the United Textile Workers Association, and made our enquiries, you amended the schedule in accordance with the powers conferred by the Act; the revised schedule being carried above and below the existing scale of temperatures, &c., and showing in a fourth column for the guidance of manufacturers and others the actual percentages of moisture present in the atmosphere at the several readings of the hygrometer.

Amended Table, Schedule A., approved by Secretary of State.
(*Gazetted 25th July* 1893.)

COTTON CLOTH FACTORIES ACT, 1889.
52 and 53 Victoria, c. 62.

SCHEDULE A.
Maximum Limits of Humidity of Atmosphere at given Temperatures.

I. Grains of Vapour per Cubic Foot of Air.	II. Dry Bulb Thermometer Readings. Degrees Fahrenheit.	III. Wet Bulb Thermometer Readings. Degrees Fahrenheit.	IV. Percentage of Humidity. Saturation = 100.
1·9	35	33	80
2·0	36	34	82
2·1	37	35	83
2·2	38	36	83
2·3	39	37	84
2·4	40	38	84
2·5	41	39	84
2·6	42	40	85
2·7	43	41	84
2·8	44	42	84
2·9	45	43	85
3·1	46	44	86
3·2	47	45	86
3·3	48	46	86
3·4	49	47	86
3·5	50	48	86
3·6	51	49	86
3·8	52	50	86
3·9	53	51	86
4·1	54	52	86
4·2	55	53	87
4·4	56	54	87
4·5	57	55	87
4·7	58	56	87
4·9	59	57	88
5·1	60	58	88
5·2	61	59	88
5·4	62	60	88
5·6	63	61	88
5·8	64	62	88
6·0	65	63	88
6·2	66	64	88
6·4	67	65	88
6·6	68	66	88
6·9	69	67	88

I. Grains of Vapour per Cubic Foot of Air.	II. Dry Bulb Thermometer Readings. Degrees Fahrenheit.	III. Wet Bulb Thermometer Readings. Degrees Fahrenheit.	IV. Per-centage of Humidity. Saturation = 100.
7·1	70	68	88
7·1	71	68·5	85·5
7·1	72	69	84
7·4	73	70	84
7·4	74	70·5	81·5
7·65	75	71·5	81·5
7·7	76	72	79
8·0	77	73	79
8·0	78	73·5	77
8·25	79	74·5	77·5
8·55	80	75·5	77·5
8·6	81	76	76
8·65	82	76·5	74
8·85	83	77·5	74
8·9	84	78	72
9·2	85	79	72
9·5	86	80	72
9·55	87	80·5	71
9·9	88	81·5	71
10·25	89	82·5	71
10·3	90	83	69
10·35	91	83·5	68
10·7	92	84·5	68
11·0	93	85·5	68
11·1	94	86	66
11·5	95	87	66
11·8	96	88	66
11·9	97	88·5	65·5
12·0	98	89	64
12·3	99	90	64
12·7	100	91	64

NOTE 1.—This Table embodies, unchanged, the figures of the previous Schedule, which is now extended to meet cases of temperature below 60° and above 95° Fahrenheit.

NOTE 2.—Column IV. is new, and expresses the percentage of Saturation equivalent to Column I. It will be a practical guide to manufacturers, who will thus perceive readily that the higher the temperature, above 70°, the drier is the permitted atmosphere.

27th April 1893. H. H. ASQUITH.

Mr. E. H. Osborn H.M. Inspector of Factories who has the superintendence of the administration of the Cotton Cloth Factories Act, 1889, reports as follows:—

"In submitting a brief report on the working of the Cotton Cloth Act for the past year, it is satisfactory to be able to state that on the whole its provisions have been better observed than in preceding years. This arises not only from the vigilance of inspection and the general goodwill of employers, but from the increased intelligence of managers and others in authority as to its value in promoting more equable conditions of work than formerly prevailed, when they had no means of testing the atmosphere, and everything was mere guesswork.

"The hygrometers are better understood, and better kept in order, and the advantages of the improved ventilation in lessening the amount

of sickness, especially in the hotter season of the year, are generally apparent and acknowledged; for it will be readily understood that work is better done by the regular workers, than by those who only temporarily replace them when "off sick."

"While the average of statutory notices remains fairly constant, it is noteworthy that the contraventions are far less important than formerly, mostly connected with small oversights in the matter of ventilation, or carelessness with regard to the thermometers, while there have been very few cases of over humidity, these in most instances resolving themselves into cases where the hygrometer has been neglected, or allowed to become dry, and the notice has invariably brought about great attention to avoid a repetition during the probationary period allowed by the Act.

"The addition of the fourth column of percentages of moisture to the Schedule has also made it clearer to all managers and workers alike, that a high temperature is disadvantageous, because the Act only permits an amount of humidity at the higher ranges, which approximates to a "drying" atmosphere, and is therefore proportionally prejudicial to good weaving.

"For this reason it has enabled us to secure that the pipes conveying the steam should be jacketed with nonconducting composition, thus reducing the heat formerly radiated from these pipes, and enabling a conditioned atmosphere to be obtained at less pressure, expenditure and temperature of the steam infused, whereas formerly the accompanying heat often neutralised the humidity sought to be obtained.

"The Schedule proposed last year by the abandoned Bill would have been unsatisfactory to all parties, and was merely a series of increasing reductions, based upon no knowledge of atmospheric conditions, and would have substituted positively "drying" atmospheres for the present series of "nondrying" conditions, which besides proving adverse to manufacture and wage earning would have increased the amount of fibrous dust suspended in the air (irrespective of sizing material) and been actually prejudicial to health, for De Chaumont states that for England the difference between wet and dry bulb thermometers should not be more than 5°, and another authority states we should endeavour to maintain in artificially heated rooms 82 per cent. of moisture.

"An interesting experiment was tried in three sheds of one firm on the same day in an attempt to work to this proposed Schedule. No steam was put in, and the dry bulb showed 77° the wet bulbs 71° and 70·5, (or one degree and a half degree respectively more humidity than allowed by the suggested Schedule), by 10 o'clock the weaving was so bad, and so much cloth was being spoiled owing to the rapid desiccation of the air, the trial had to be abandoned.

"An erroneous idea prevails that the great heat of a weaving shed in the hot season of the year arises from the means used to produce humidity, the fact being that this excess of heat is caused by the construction of the shed roofs with their large surfaces of slate and glass exposed to the full sunshine. Through the kindness of two employers in different parts of Lancashire, who adopted my suggestion of recording the readings of solar maximum thermometers (black bulb) in vacuo, I find solar maxima registered of 141° and 125° during the hottest days, hence it should create no surprise that the temperature of a shed on such days should exceeed 80°, and in a non-steaming shed near one of these the temperature ranged from 2° to 5° above an artificially humidified shed in its immediate vicinity.

"In like manner the construction of a shed conduces to its great coldness in winter in cases where heating is not maintained during the night

or as sometimes occurs from Saturday till Monday morning, naturally under such circumstances the factory becomes starved and the warps dry, so that the weaving is bad for the first part of the day and the air cold, and this often gives rise to complaint that the fans are responsible for such a condition of things. But this is disproved by the fact that the temperature will steadily rise while the gas is alight although the fans are at work. I am glad, however, to note that the value of the ventilation is becoming better understood, and in some districts the operatives rightly demur to any interference with it, though many, especially the women, are apparently under an impression that air cannot be foul if it is cold, which leads them in their own homes to stop all possible crevices.

" Incidentally, while seeing that the supply of fresh air is maintained, we have been able to secure valuable alterations in the arrangement of closets, &c., and their disconnection from the sheds, wherever effluvia have been noticed, and they have ventilated into the weaving shed; and in almost every case our recommendations have been carried out readily and thoroughly, and much credit is due to Mr. Parkinson and Mr. Williams for the pains they have taken in these matters, as well as in the whole range of their duties.

" In his report upon his work in the Blackburn district, Mr. Williams mentions that in addition to the cloakrooms fitted up at considerable expense by Messrs. Greenwood Bros., Mr. F. Baynes, and Messrs. J. Dugdale & Sons, two more have been established by Messrs. Hornby, and by the Albert Mill Co. He goes on to say; 'wherever they have ' been tried, these rooms have been much appreciated by the weavers, ' and I am confident the success attending them will induce other ' employers to make similar provision," and again "I am glad to say, ' already, I have seen overcoats brought to the cloakrooms by weavers ' who have told me the presence of these articles in the mill was due ' to the fact that they could have them dried in a warm and clean room ' instead of having to hang them on a damp and dirty wall or pillar. ' In all cases I may say the rooms have led to cleaner garments being ' worn.' "

The following extract from the same report is also of interest. ' Below will be found the average rates for the three years (1890, 1891, ' 1892), extracted from the report of Dr. Wheatley, (the able medical ' officer of health, Blackburn) and against these the death-rates of the ' rest of the borough, calculated from figures supplied by Dr. ' Wheatley.

Age Period.	Average Death-rate per annum per 1,000 of Population.	
	Weavers.	Rest of the Borough.
15 to 25	4·2	6·7
25 ,, 35	5·3	9·2
35 ,, 45	11·2	17·8
45 ,, 55	18·3	27·4
55 ,, 65	67·8	53·9
65 and upwards	200·0	116·9

" ' It will be observed that, at every age period up to 55, the mortality ' among weavers was considerably less than among the rest of the

'Borough, and I may remark that beyond that age the number of 'weavers employed was under 600. Such a result as this is, I think, 'surprising, bearing in mind the fact that the "rest of the Borough" 'comprehends all the upper and middle classes of the town.

"And 'it should be noted that the death rates for spinners, for winders 'and warpers, and for cardroom hands are also given, and show that 'the mortality amongst weavers was lower than amongst spinners at 'every age period, and was lower than amongst winders, warpers, &c., 'and cardroom hands at every age period except one, viz., that between '55 and 65."

"Undoubtedly a primâ facie interest attaches to these figures; but it is not possible to estimate their actual value, inasmuch as only the last employment of a person is registered, and the occupations of married women and widows are merged in those of their husbands.

"Mr. Parkinson informs me "that the ventilation of the sheds gives 'general satisfaction to the employeés, and that complaints of insufficient 'air are almost unknown. During the hot weather I received 'complaints from the local union that the heat in several weaving sheds 'was insufferable, and requesting my attention. On reference, I found 'that the sheds mentioned were not under the Cotton Cloth Act, but 'forwarded the complaints to the local inspector. I had no complaints 'from any sheds under the Cotton Cloth Act.

"'Regarding excessive steaming, I find it it is extremely rare, the 'readings of excess being in most cases caused by inattention to the 'hygrometer.

"'There is a great improvement in the case of the hygrometer, as 'most firms seem to have at length grasped the idea that taking the 'readings and attending to the instruments must be done at proper 'hours and in a systematic manner. I find in almost all cases where 'fans have been stopped, that it has been done by the operatives 'themselves, and have had a very few cases where the trunks of fans 'have been stopped up by the hands.' This, of course, could not occur without the connivance of the overlookers. Mr. Parkinson also draws attention to the difficultly of tampering successfully with the instruments, and in regard to this, as statements are sometimes made that these practices are habitual when an inspector is about, I may point out that no one who has a competent knowledge of the working of hygrometers can possibly be deceived by any manipulation of these instruments, however clumsy or ingenious the attempt may be; this information may reassure those who apprehend that H.M. Inspectors are continually being hoodwinked by the cunning machinations of crafty managers.

E. H. Osborn."

IV.—Particulars Clause, Factory Act, 1891, Section 24.

I have received the following satisfactory Report from Mr. T. Birtwistle, H.M. Inspector of Factories, as to the operation of this clause in the United Kingdom:—

"During the past year I have visited over 1,100 weaving factories, and, in addition to seeing that full particulars were supplied to the workers that come under the protection of the clause, I have in almost every instance tested their accuracy; as I said in my last report, it will be some time before I can once over visit every weaving factory in the

United Kingdom, but the very valuable assistance I have received at the hands of my colleagues attaching to the textile districts, and the many employers who have written asking to be informed as to the nature of the particulars required, showing, as well as expressing, their willingness to conform to the law, has rendered my task far more easy, and the result more satisfactory than it could otherwise have been.

"In visiting Ireland and Scotland, I received the greatest possible courtesy from the employers, who showed remarkable readiness to comply with the provisions of the clause, immediately their attention was drawn thereto, and it may to their credit be said, that the particulars they have been in the habit of supplying, seem, so far as I am able to gauge, substantially correct.

"I am glad to be able to say that the objections that were urged against the section in its infancy, by certain employers, seem to have almost if not entirely vanished. The contention that if the particulars necessary to ascertain the price to be paid for the work were supplied, it would open up a channel by which their competitors would be able to ascertain how their goods were made, has proved, as I always said it would, to be a myth.

"Previous to the North and North-East Lancashire employers, on the 27th March last, interviewing the chief Secretary of State for the Home Department, an impression had got abroad fanned by certain officials of a branch employers association, that in asking for the particulars to be supplied in writing, I was asking for more than the Act required, and more than the Secretary of State had said was necessary, but on that occasion a few words dropped from his lips, to the effect 'that the 'Home Office had always held that the particulars should be supplied 'in writing,' which seems to have almost if not entirely set that point at rest.

"Some of the most ingenious, far fetched, and ridiculous defences imaginable have been set up by some employers and their advocates, when charged with giving incorrect particulars. I suppose this arises from the fact that a conviction for giving incorrect particulars is practically a conviction for fraud, but these defences scarcely if ever succeed, except when a majority of the bench are composed of persons who having no special knowledge of the trade are led away thereby.

"I have to thank my colleagues attached to the textile district for the very valuable and ready assistance they accorded me, not only when I have been called into their districts, but their attention to the maintenance of the section in my absence."

This clause is of very limited application, and it is worthy of consideration whether the same regulations should not be extended to other departments of the textile manufactures, where they work by piece, and the employees have difficulty in ascertaining the rate of wages at which they are paid for their work.

V.—Accidents and Fencing of Dangerous Machinery.

One of the most useful functions of the factory staff is that of preventing, as far as possible, machinery accidents by protecting all parts where danger can be foreseen, and by examining into the causes of such accidents as may occur through unforeseen circumstances.

It is lamentable to think of the amount of suffering caused by unfenced machinery in spite of the efforts made to prevent it, and

the more so when one considers that the great movement which goes on in substituting mechanism for hand labour is constantly creating fresh sources of danger.

This calls for unceasing watchfulness and activity on the part of the staff.

It may not be amiss here to allude to the usefulness of the certifying surgeons in inquiring into accidents, it being their duty to investigate and report to H.M. Chief Inspector the circumstances attending every serious accident. These reports materially assist the heads of the Department in seeing that no accident, apparently preventible, shall escape the scrutiny of H.M. Inspector of the district.

Considering the great yearly increase of machinery, previously alluded to, which unless carefully looked after, would yield an enormous catalogue of maimings and death, and considering also that accidents are now more completely reported, a slight increase may be fairly attributed to these causes.

The following reports and suggestions from some of H.M. Inspectors will show that they are fully alive to the importance of this branch of their duties.

Attention has been called in former annual reports to the importance of guards being made for machinery by manufacturers before delivery to occupiers of factories, and there can be no difference of opinion that ingathering cogwheels, with which the workpeople are liable to come in contact should be so fenced, as it can be done so much better by the machinist at the works than after being fixed in the factory. If used after delivery before being so fenced the occupier is liable to be prosecuted under the Factory Act, 1891, section 6, a very important clause, considering the liability to accident from such parts being unfenced.

Mr. Cramp, H.M. Superintending Inspector for Birmingham and the Midland Counties, observes :—

"*The accident reports* for the year show a slight increase, the number being 1,561 against 1,515 in 1892. Of the 1,561 I regret to say that 108 were *fatal*, and of these fatal accidents about 25 were caused by falls from scaffolds, platforms or other insecure places, 16 by falls of stone, metal, or other heavy material on to workers, 19 by locomotives or waggons running on railways through works, 3 from breaking of grindstones, 6 from explosions of metal or steam, and 19 from machinery or mill-gearing. Two of the fatal accidents, I regret to say, were to boys under 13 years of age, one of whom fell off a gangway, and the other was caught by an elevator in a brick manufactory.

"Of the total number of accidents only 184 occurred to females, and only 11 to children of both sexes. Circular saws are responsible for 127, and steam stamping presses for 111. Many of the others were caused by shears, steam hammers, planing machines, cranes, and the rolls of iron mills, calenders, paper machines, &c. The greater proportion of the accidents were caused by tools or parts of machines to which fencing is not practicable, some owing to removal of guards, especially for cleaning machinery in motion, and only a very small proportion from unfenced cogwheels, dangerous parts of machinery, or mill-gearing."

Mr. Johnston, H.M. Deputy Superintending Inspector of Factories, remarks:—

" *Accidents.*—The new provisions contained in the Factory Act, 1891, requiring all dangerous parts of the machinery to be securely fenced have been of great use in promoting the security of workpeople.

" Amongst machinists and in woollen mills it has been unusual to fence cog-wheels, &c., as completely as they ought to be, probably because the number of accidents in any one factory not being great, the owner has not been aware how large an aggregate of suffering and loss results all over the country.

" The question of compensation for such injuries being now und the consideration of Parliament, it may not be out of place to refer to some remarks which I embodied in my report for 1891.

" I have for some years advocated a system of insurance to cover all accidents, even such as may be caused by a man's own carelessness, having been struck by its utility as adopted by the flour millers of the Midlands.

" The Employers' Liability Act has certainly been of use in making users of machinery more ready to adopt measures of precaution; but it has also unfortunately given rise to a most unsatisfactory system of insuring themselves merely against the liabilities created by this Act.

" For this limited kind of insurance is quite fallacious, as it frequently happens that there is no right to recover compensation under the Employers Liability Act, and yet the employer may be liable to an action at common law or under the Factory Act.

" Accidents may be divided into three classes:

" A.—Those in which there is a right of recovery under the Employers' Liability Act.

" In this case the object of the insurer is attained. The injured person obtains compensation whilst he himself is freed from the claim.

" B.—Those in which there is no right of recovery under the Employers' Liability Act, but in which the injured person may recover compensation under the common law or Factory Act.

" Here again the injured person is compensated; but at the expense of his employer, whose insurance is of no avail.

" C.—Those in which there is no right of recovery either under the Employers' Liability Act or other Acts.

" Here the injured person gets nothing, whilst the employer feels that what he is paying for insurance ought to secure something for him.

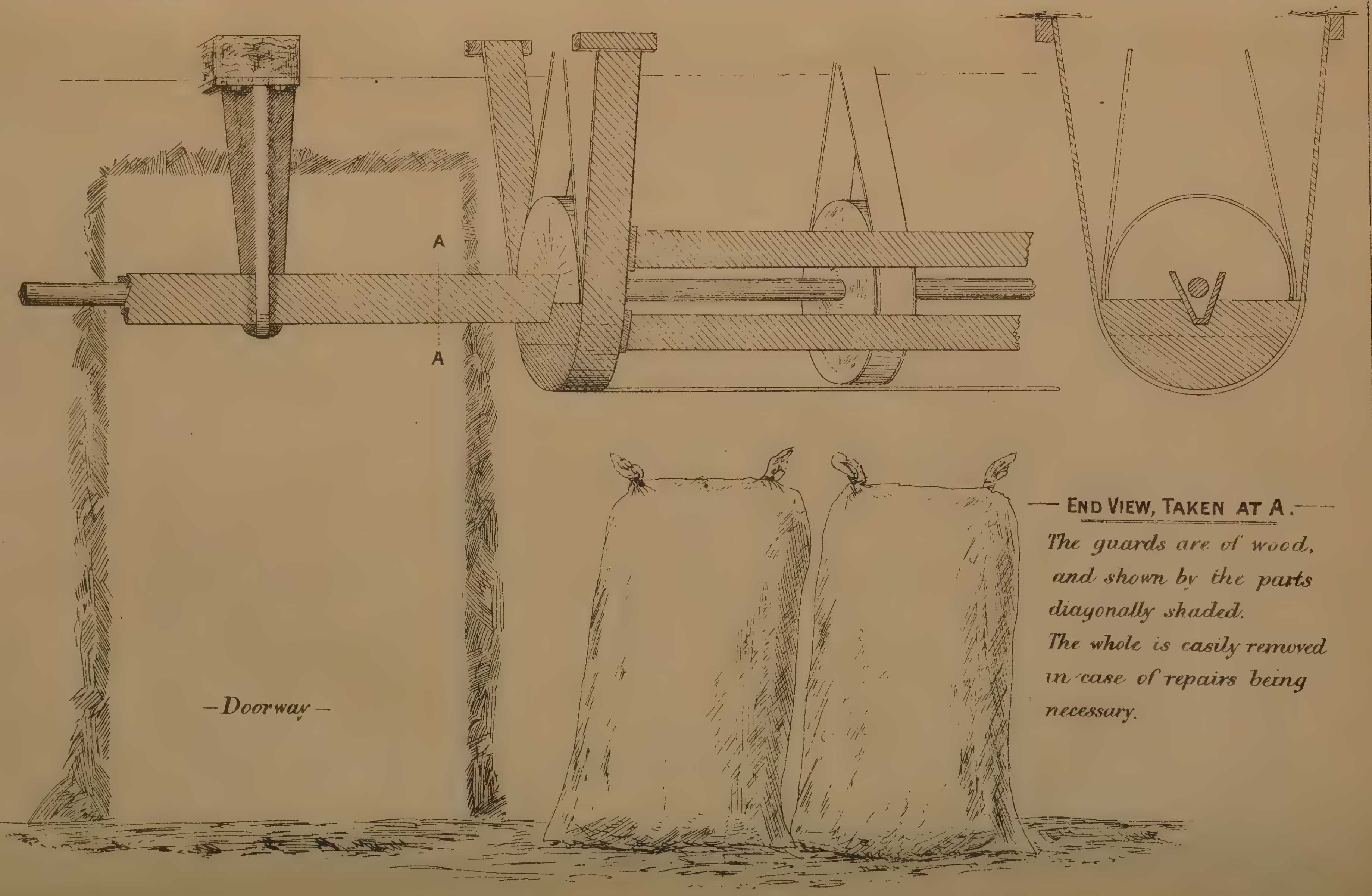
" My own experience is that quite half of the accidents which occur fall under the last heading, so that a mere insurance against the Employers' Liability Act must prove most unsatisfactory; for, even if the Act be made as perfect as possible, there will always be a large number of injuries unprovided for, such as those caused by purely accidental circumstances, or the carelessness of the sufferer.

" Here I may remark that there is a certain amount of carelessness inherent in human nature, which cannot be eradicated, and that people are entitled to be protected against the consequences of it.

" But this can only be effected by an insurance against all accidents, however caused. Now the proposal to prevent contracting out of the Act (Employers' Liability Act) seems to have unduly alarmed those companies who have a system of universal compensation, and to threaten a complete overthrow of this useful system.

" This seems to me to arise out of a misunderstanding on their part, for cannot the system be worked still, notwithstanding the inability to contract out of the Act? Is it reasonable to suppose that if

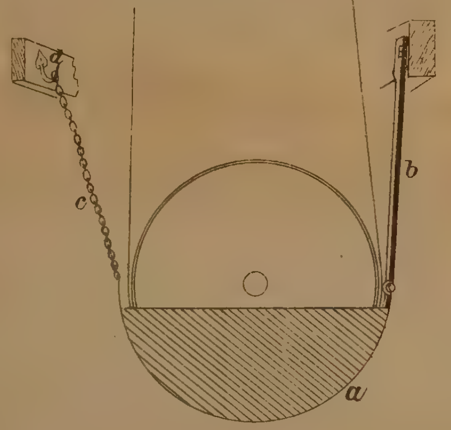
SKETCH SHOWING ARRANGEMENT OF GUARDS TO PULLEYS & SHAFTING, WHERE ROOMS ARE LOW.



— END VIEW, TAKEN AT A. —

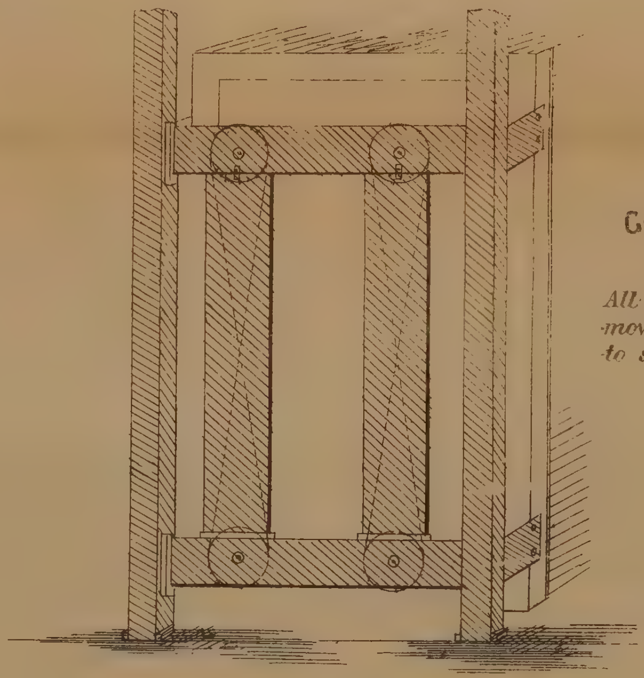
The guards are of wood, and shown by the parts diagonally shaded.

The whole is easily removed in case of repairs being necessary.



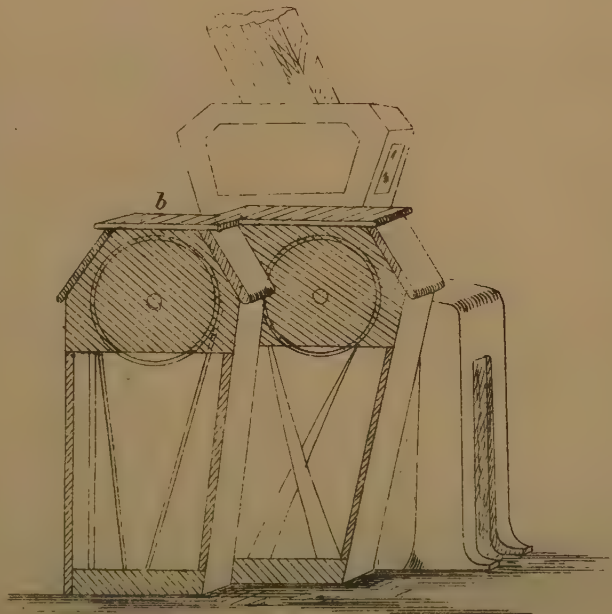
Guard for a Low Pulley & Belt.

The trough a is connected by a hinge to the rigid support b. On the other side it is supported by a chain c which can be detached from the hook d.

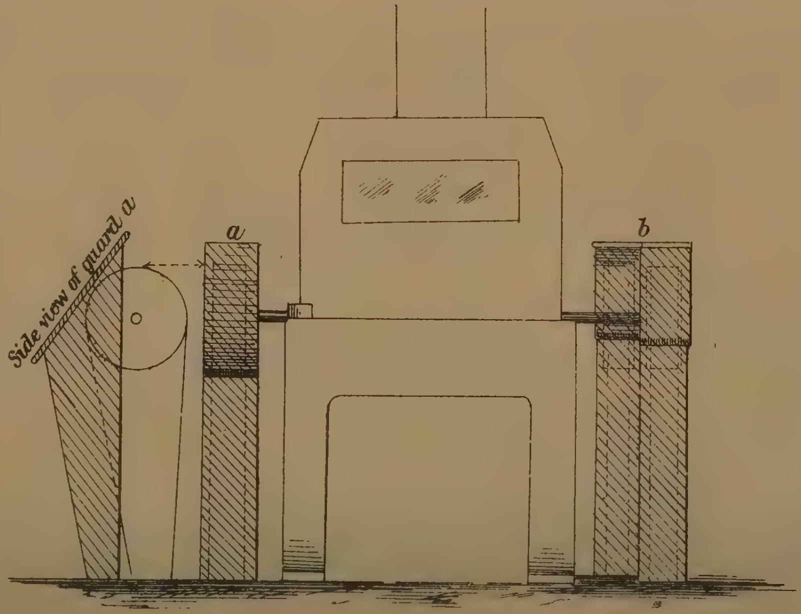


Guard to Driving Straps at End of Purifiers.

All the woodwork is easily removed, each portion fitting into slots or sockets.



Cover to Driving Pulleys at Side of Double Roller Mill.



End View of Double Roller Mill.

Showing guards to pulley at each side.

employers are prepared to compensate every injured person, the latter will persist in appealing to the law? Surely, considering the uncertainty of the law, they would prefer taking what is offered, even if it should be a little less than might possibly be recovered by process of law.

"But the contrary is really the fact, for larger compensation is paid out of these funds than would be awarded under the Act.

"From the joint working of the Employers' Liability Act and the system of insurance great good may be expected to result, for thus employers who have a benevolent care for their workpeople will still be able to befriend them, whilst the employees of those who have not the same interest in their welfare will be cared for as far as can be effected by legislation, and it may be hoped that by degrees employers generally may be brought to recognise the advantage of a comprehensive system of insurance."

Mr. Blenkinsopp, H.M. Inspector, Peterborough, remarks:—

"The necessity of fencing machinery still requires close attention. However much may be done, more always seems to be required. In flour mills this arises to a great extent from the continued additions of new machinery; and, as has been observed in other districts, when this occurs in oldfashioned mills, the confusion becomes terrible. Another trade that seems to have increased very much of late years is that of the timber merchants. Not merely has the number of sawmills increased, but there are new kinds of saws, and so many machines for planing, moulding, &c., that a modern sawmill is really quite an important factory. In all trades I find the new men much more ready to fence than those who have been in business some years. In one flour mill in Rutland I found a lot of new machinery crowded into an old-fashioned mill, and all in an unfenced and dangerous condition. One main shaft crossed a doorway. However, I found the occupier most obliging, and after I had explained my views to him and had described what kind of fencing I liked, he set to work vigorously and did even more than I asked. The fencing was so well done that when I was absent on sick leave, I asked Mr. J. H. Walmsley to go to the mill and make me a few drawings of some of the parts. This he very kindly did, and I think you will consider them worthy of insertion in your Annual Report. The woodwork (diagonally shaded) is made in sections, so that parts can be removed at a time, and if, as often happens, there is a pulley larger than others on the same shaft, a section can by means of longer supports, be cranked downwards and outwards to guard the larger pulley. The wooden guards to the purifiers, centrifugals, &c., are also very ingeniously arranged, so that any particular pulley, belt, small shaft with cogs, can be easily got at when necessary. The fences to the pulleys and belts of the rolls are also very effective.

"Gas engines are now so numerous, and the starting of them, by pulling the fly-wheel round by hand, is attended by so much danger, that it was desirable to find some suitable means of starting the engine without touching the wheels. I complain, perhaps, that a fly-wheel is unfenced, when I am told that the fence has been taken down in order to start the engine, and has not been replaced. Then I explain that a perfectly safe handle has been invented, so that a permanent fence can be put up; the reply is, our 'engine, you will observe, has a self starter, so we do not need a handle, but the starter is 'out of order.'"

"Until there is a contrivance which does not get out of order, a handle is essential for safety. I have before now referred to the handle

invented by A. Dawes of Kettering, and I now enclose you drawings of it. Of course I am aware that other handles have been invented, but I was never satisfied with any handle till Dawes invented his. It has now been in use for some time in many factories in Kettering, Rushden and neighbourhood, and gives great satisfaction. Some engineers have told me that they would not be without it 'for the world.' A lever on same principle is invented for vertical engines. Messrs. Lewis and Son, of Kettering, have invented a handle, which they showed me the other day. They have also a two handled lever with the bush in the centre, and they claim that with this lever two men can start a 20-horse gas engine. They submit that Dawes' handle is far the best that has been invented up to the present, but they claim that their's is still better. Of this I have not yet had any experience.

"Owing to this invention of a perfectly safe and powerful handle, it is possible to put up fixed and secure fencing to most gas engines. The ordinary "Otto," whether vertical or horizontal, can now be completely fenced. I send a drawing of the fencing that I usually recommend. The bar A. in Fig. I., side elevation, fits into point A. in Fig. II., and guards the belt B. The bar D. in Fig. II. is placed rather too high, it is lower than in the drawing, and guards the front of the pulley on which belt B. runs. The box M. is removable, it hooks on to the frame of the fence, and can be replaced after the engine is started, and the handle removed from the shaft end. The engineer can thus walk all round his engine, and, if necessary, can touch any part of it without being inside any part of the fencing. The framework of the fly-wheel fence is better covered with wire netting than with anything more solid. A full view can be obtained of the engine, and dust and dirt not collected.

"As I did not consider the drawing of this fencing quite satisfactory, I had some photographs taken, which also I enclose. You will observe that No. I. shows the complete fencing, except that the wire netting is not visible without a magnifying glass; No. II. shows the box taken off, and a man starting a horizontal engine with the handle; and No. III. shows a man starting a vertical engine by means of the lever. Unfortunately in this one there is more of the man than the engine.

Additional machinery is constantly being put up in boot factories also, and left unfenced, the people saying that they had been expecting me to come round and tell them the best way to fence. I prosecuted the occupier of a large flour mill, in which the belts and machinery were very dangerous and totally unfenced. The Bench, however, declined to inflict a penalty, but adjourned the case for the fencing to be done.

"There have not been so many accidents reported as in some years; the chief of these were, a shocking fatal accident to a man by machinery in a saw mill, and one by which a youth lost his arm by becoming entangled in a small belt at a flour mill. I am afraid, however, that all accidents are not reported. Persons injured in the boot factories at a distance from Peterboro' are hurried off to Northampton Infirmary and nothing said about the matter. I detected one such case, and prosecuted the firm for not reporting. An accident which might have been attended by fatal consequences occurred at a boot factory. A girl stooped down to pick something off the floor, and her hair was caught by a shaft under the sewing machine bench. I had, prior to that, expressed my doubts whether the fencing would prove sufficient 'when the pinch came,' but was told that nothing could fall on the ground, as it would roll into the well or trough which runs along

A. DAWES'

PATENT

GAS ENGINE HANDLE.

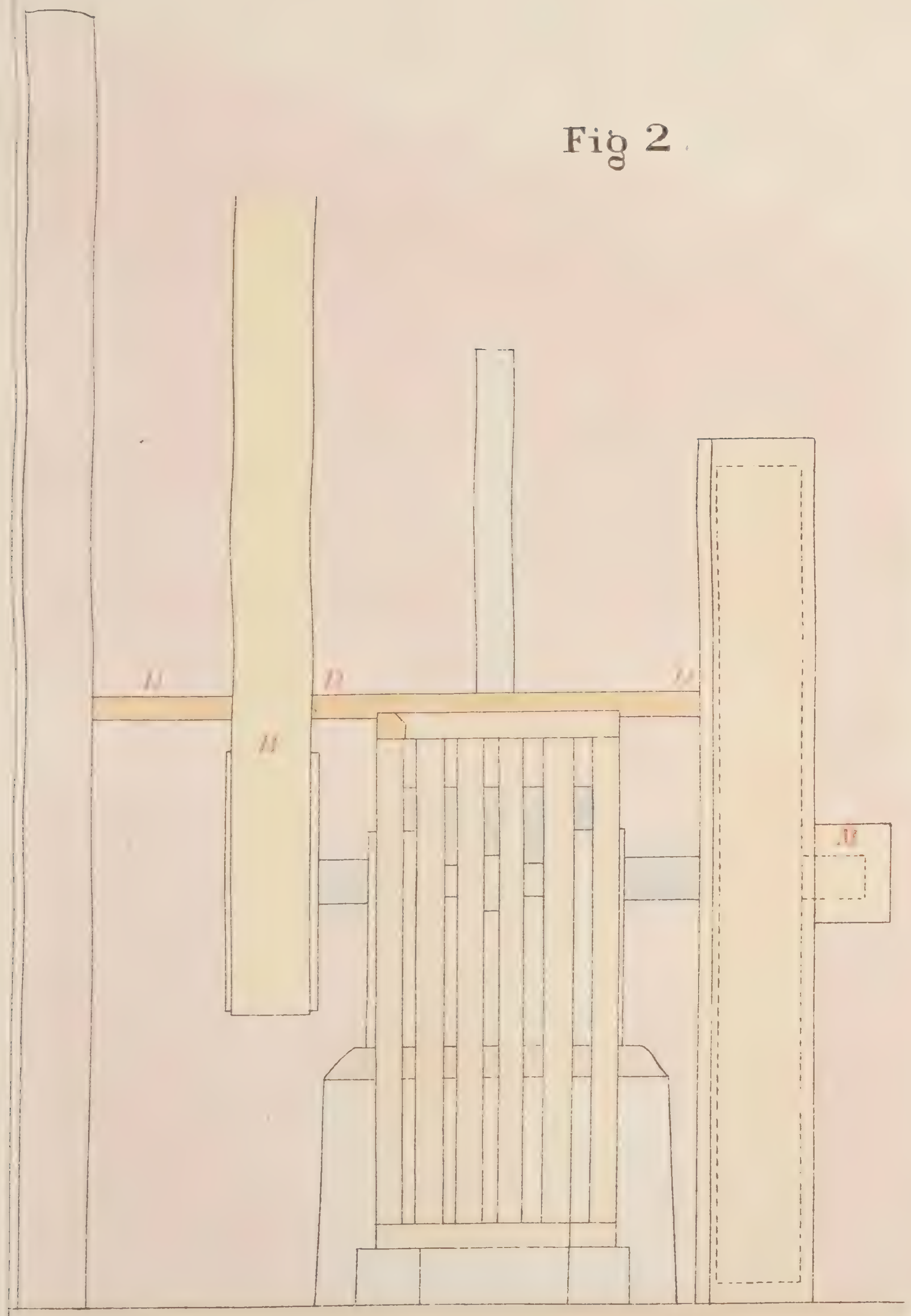
THIS HANDLE PROVIDES A SIMPLE APPARATUS TO REVOLVE CRANK ON FLY WHEEL SHAFT OF GAS ENGINES.

Consisting of a Bush which slides on the end of the Shaft, having a pivoted Lever with projecting surfaces, which give a FIRM and SURE GRIP. By making a reverse motion, it will instantly release itself.

Wyman & Sons. 5130. 2. 94.

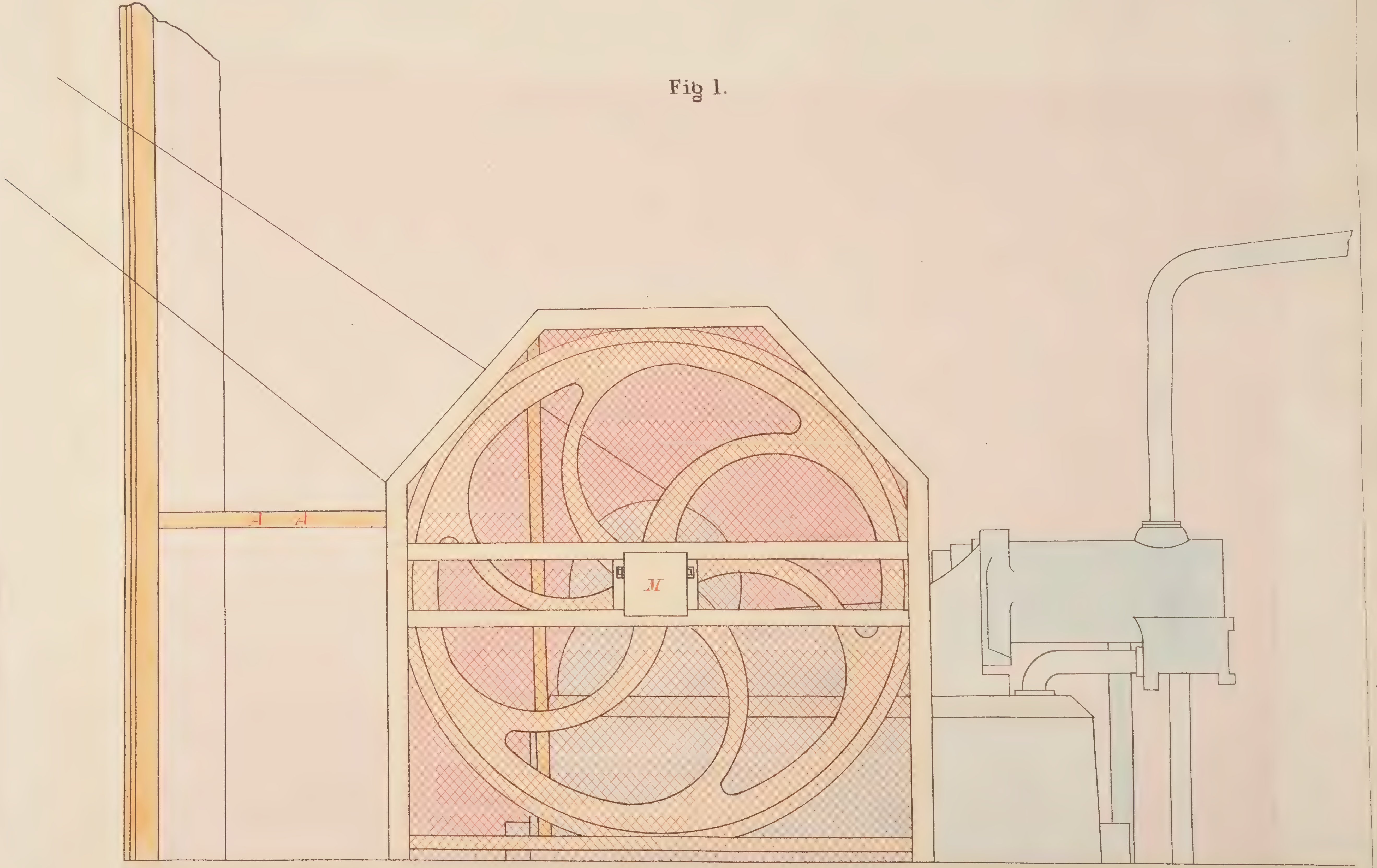
Front Elevation.

Fig 2.



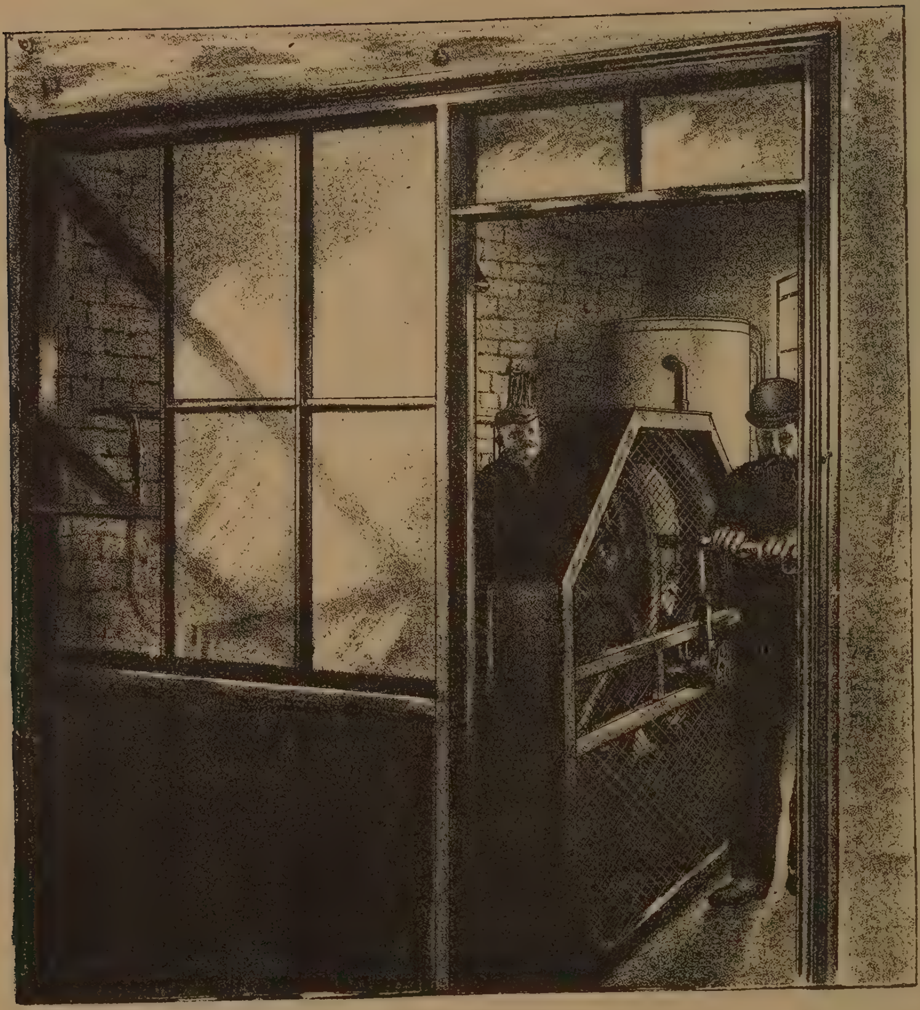
Side Elevation.

Fig 1.



Red Ink Lines shew Wire Netting guarding Fly Wheel.

Wyman & Sons, Ltd. Lith. 63, Carter Lane 5730



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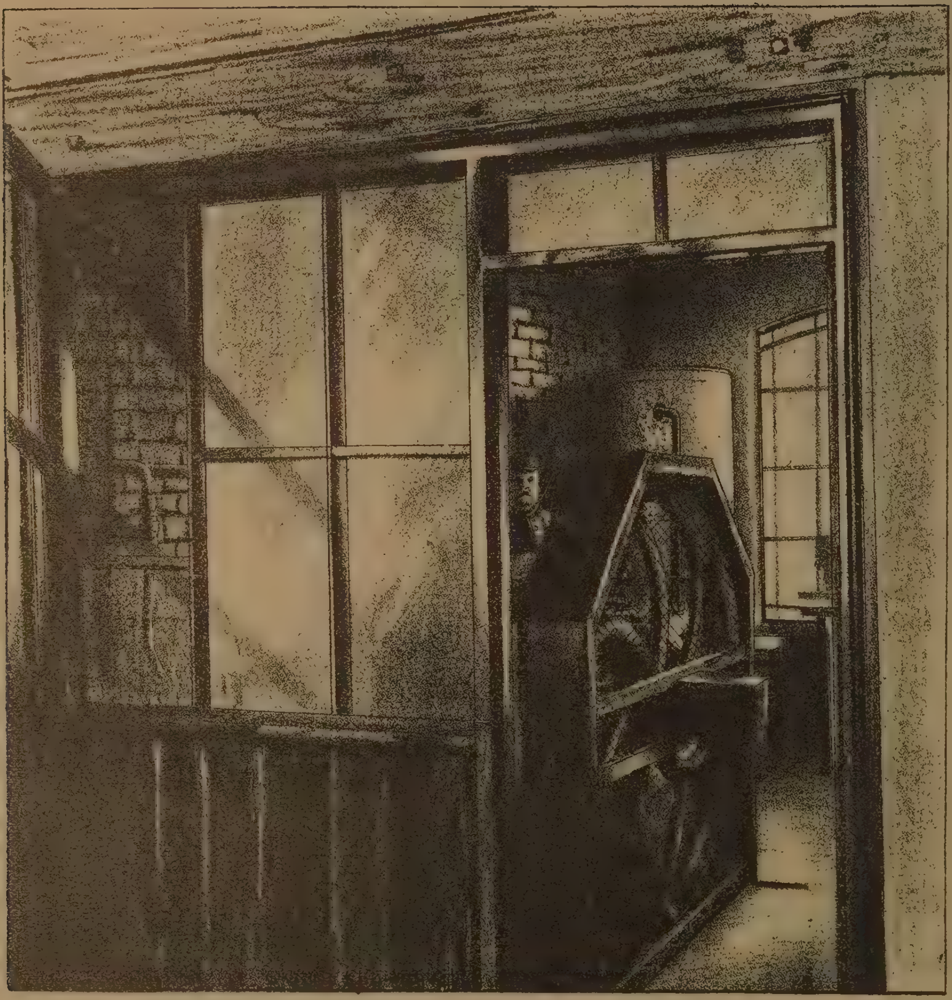

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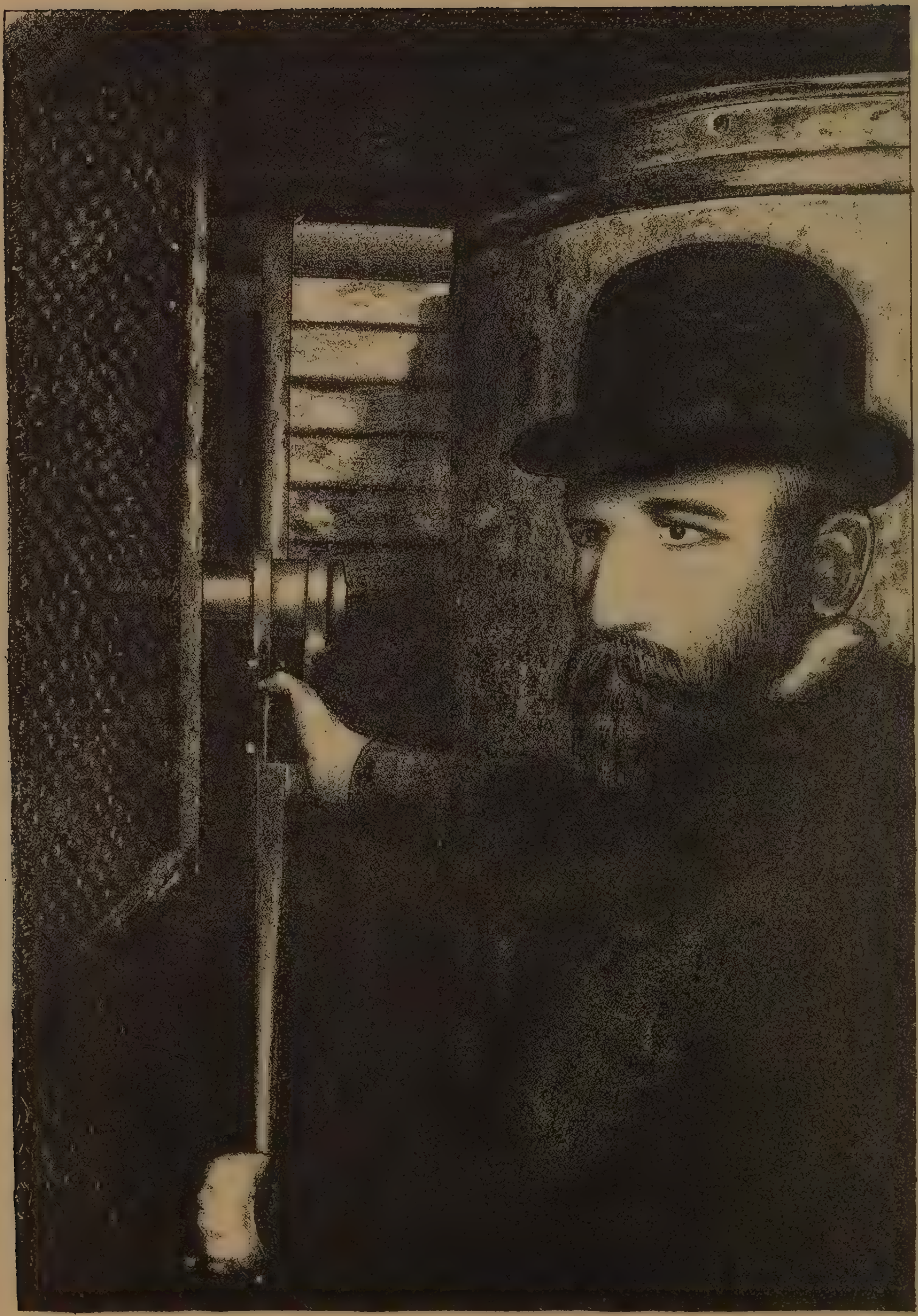


between the two rows of sewing machines. The girl had very fine hair, and was proud of it, and used to let it hang down loose, and the draught made by the revolving shaft drew it in between the two bars that constituted the fence. The hair was completely pulled off one side of her head without the skin giving way, so she was saved from being scalped. In spite of the many precautions adopted, one or two bad accidents have occurred at brick making presses, but not so many as formerly."

Mr. Bignold, H.M. Inspector for the Norwich district, observes with reference to his prosecutions :—

"*Fencing and Accidents.*—The most important cases have related to the fencing of mill-gearing and dangerous machinery and to accidents resulting therefrom; and with respect to the giving notice thereof, and of inquests in fatal cases there seems to be a defect in section 29 of the 1891 Act which has prevented my taking action in two fatal accidents. I hope it will be corrected at the first opportunity.

"The Employers' Liability Bill, now before Parliament is already operating very beneficially in causing employers to fence and to take every precaution against accidents, their liability for which will be so immensely increased by the Bill. I have twice been called as a witness in actions brought in the county court under the existing Employers' Liability Act, but it seems probable that litigation will be very greatly diminished by the Bill, which not only abolishes the doctrine of common employment, but very clearly defines the liability of the employers.

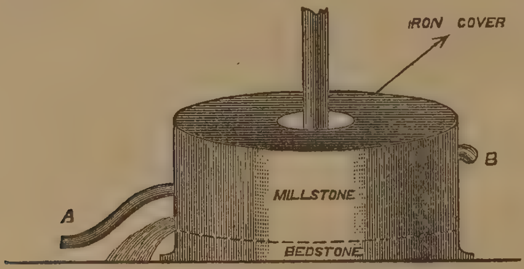
Mr. Bowling, H.M. Inspector for the Southampton district, remarks :—

"*Accidents.*—In your letter, No. 19, you ask for information on special points of interest, the first of which is the *fencing of dangerous parts of machinery*; and under this head it may be well to give you first a short table showing the number and nature of the accidents which have occurred in this district and of which I have received the usual official notice :—

Total number of accidents reported	100
Accidents requiring investigation	34
Fatal accidents	3
The fatal accidents were caused as follows—	
Fall of chalk in lime works	1
Grindstone flying	1
Falling on to a cylinder in paper mill	1
Of the other accidents the principal causes were—	
Circular and band saws	20
Cogged wheels	16
Cutters of various kinds principally planing machinery	11
Rollers	4
Shafting	2
Hoist	1
Pulley and band	1

"The remainder were comparatively unimportant and caused by various machines not easy to classify. The first fatal accident requires no explanation from me. The second happened to a millstone dresser in some cement works and was caused by the bursting of a millstone, the man was alone in the room at the time and no one saw the accident happen. The machinery is in every respect similar to that used in a

flour mill consisting of the ordinary bedstone on which revolves the millstone. The whole is completely cased in by a strong sheet iron casing.



A.—Shoot cover where the cement is discharged.

B.—Handle for lifting off iron cover.

"The millstone must have burst within the casing and it is supposed that pieces of stone getting jammed inside caused the casing to revolve, and the shoot A. coming rapidly round appears to have struck the unfortunate man on the legs throwing him to the ground and while in this position a piece of the stone which burst through the casing must have struck him on the head, causing his death. I am afraid that we, as factory inspectors, can do little to prevent such accidents as these and the only thing I can suggest is that it might be made compulsory that all millstones should be periodically examined and tested.

"The third fatal accident occured in a paper mill to a young person aged 17 who was employed as an assistant at a paper making machine. At the time of the accident he was employed beating with a stick the felting over which the pulp is carried in the process of being converted into paper; this is done in order to clean the felting. In this case again, no one actually saw the accident happen. The lad's mate, who had temporarily left him, on returning found him entangled between the hot cylinder and the felting.

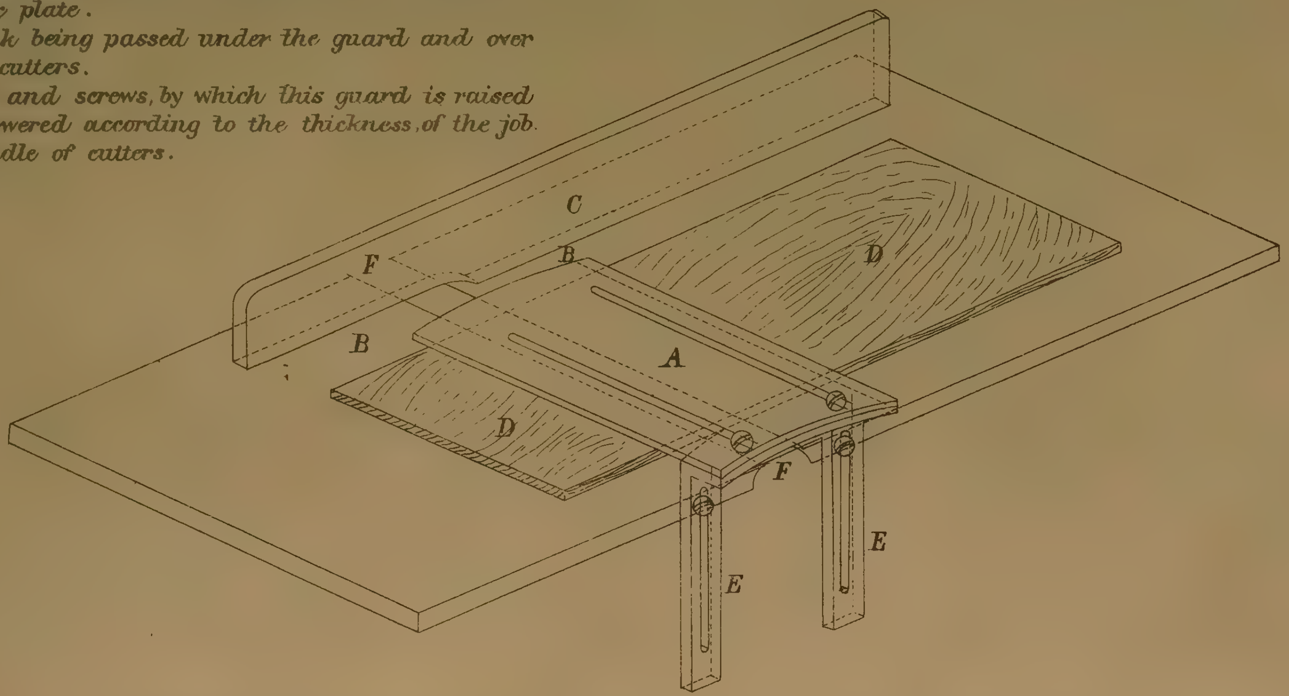
"The opinion in the mill was that the lad lost hold of his stick and seeing that it would get between the hot cylinder and felting, and would cause damage, tried to recover it and, slipping, was drawn in.

"On the other hand it is probable that he was crossing a plank which spans the felting n order to work on the other side, and the plank being wet and slippery he fell off and throwing his hand out to save himself was drawn in. The poor boy never regained consciousness, so that no certain explanation as to how the accident happened could be obtained. The firm in this case have promised to place a guard so as to protect 'the nip' of the machine, but the place is one in which an accident would have been thought most improbable.

"From the table of those accidents not fatal, it will be seen that circular saws head the list. Generally, I have failed to induce occupiers of saw mills to adopt the circular saw guard devised by my colleague, Mr. Lakeman, or indeed any other form of guard except one to prevent any wood from being thrown back off the saw.

"The accidents from the cutters of planing tables and other cutters, again show heavily, but I am in good hope that there will be a decrease in the coming year, as I have persuaded many manufacturers to adopt a guard by which every part of the cutter except that in immediate use shall be covered. The best guard of this kind is one which the foreman at a building works in Bournemouth is having made. It fits over the whole of the cutters on the table except just enough to do edge work and works up and down on screws so that it can be adjusted to jobs of any size. The great advantage of this guard is that it is a fixture, and

A. Slightly convex guard, always covering cutters.
B. Small space always left uncovered for edge work.
C. Back plate.
D. Plank being passed under the guard and over the cutters.
E. Slot and screws, by which this guard is raised or lowered according to the thickness of the job.
F. Spindle of cutters.



MOVEABLE GUARD FOR PROTECTING CUTTERS OF PLANING MACHINES.

Wyman & Sons, Ltd, Lith. 5730·2·94

not like those that work on slots on the face of the table which can be removed at will. I attach a drawing explanatory of this guard.

"Two accidents on the cutters of planing tables have occurred during the year which must have been prevented had the men used the guards provided, in one case it was the second time the man had injured himself from working with unguarded cutters. The first time he was hurt, no guard had been fitted; and when I enquired into the matter I asked that a guard should be fitted, this was readily done, and yet within a twelve month the same man, working at the same machine lost half of his hand from neglecting to use the guard which was lying by his side.

"I think I cannot do better than conclude my remarks on dangerous machinery by asking you to find room for the following, which appeared in a pamphlet written by me in 1886 and printed at my own cost for distribution among the factories in the district then under my charge. I may add that this pamphlet has been adopted by the Factory Department in Melbourne, Australia and used as a handbook for the prevention of accidents in factories.

Prevention of Accidents in Factories.

I have for many years felt that one of the most important of my duties as a factory inspector is the administration of the powers given to me by the "Factory Act," for the protection of workpeople from the dangers to which they are exposed from unfenced mill-gearing and machinery. In making an annual official report on the operation of this Act in my district, I drew attention to the fact that I had received notices of more than 200 accidents in factories in twelve months, 112 of them being of such a nature as to require a special investigation on my part. I pointed out that this, probably, did not represent more than two-thirds of the total number of accidents which had occurred during the same period in the district, as many are not reported. I went on to say: "All of these accidents have resulted either in temporary or permanent "loss and suffering, whilst some have ended in the death of the bread- "winner of a family, *and most of them were preventible.*"

In my next Annual Report I was able to state that the number of accidents of which I had received notice had decreased to less than 100, only 29 of which required investigation, and I further remarked, "That "I hoped to live to see the time when accidents from machinery in "factories would be very rare occurrences, for I was convinced that "nearly all of them could be prevented."

In factories where there is a careful supervision by managers and foremen, so that points of danger may be detected, and where *all the fences and guards are kept in good condition*, there ought to be but little more danger to the workpeople than is met with in the ordinary vocations of life outside a factory.

I will admit at once that many of these accidents are the result of carelessness and ignorance on the part of the injured persons; but the penalty they often have to pay is so shocking and disastrous, that I am sure all manufacturers will feel that no reasonable means should be left untried to protect their workpeople from the possible results of their own carelessness. On the other hand, it must not be forgotten that a considerable number of these accidents arise from the neglect of employers to place their people in a position of practicable safety. It would be well if I could summarise all those parts of mill-gearing and machinery which are dangerous and require protection, but such a handy guide would only be in a degree reliable, and could not be

expected to cover all those points of danger which can only be discovered from day to day, and by constant and careful attention in each particular factory to its peculiarities, both of construction and of machinery used. My remarks must be more of a general character bearing on those points which experience has taught me should *always and at once* be regarded as dangerous *in all factories.*

Engines.

The "Factory Act" very properly requires every part of an engine to be securely fenced, and especially mentions the fly-wheel. Yet it is surprising to find how many fly-wheels are still unfenced, or insecurely fenced. A very common form of insecure fence is to place a single rail breast high and close to the wheel. There is nothing underneath the rail to prevent a man from slipping into the wheel pit; and should he by accident stumble and fall over the rail, it would almost act as a knife, between which and the spokes of the wheel dreadful injuries might be inflicted. If the wheel cannot be completely boxed in, the protecting rails—for there should not be less than two—should be placed at least a foot-and-a-half away from the edge of the wheel-pit, so that a man stumbling or falling could not bring any part of his body in contact with the wheel. Whenever any portion of the main shaft and gearing-wheels are in the engine-house they should be covered in. In the case of powerful beam engines, where the attendant has to mount up to a platform on a level with the beam for oiling and other purposes, the edge of the platform next to the beam should be railed round.

In large engines the governors are usually driven by a pair of bevel or mitre-wheels, and should these be in any way exposed, so that a man in passing may come in contact with them, a light metal shield should always be provided. The governor balls, by reason of their position, are often likely to cause injury. Where this is the case, protection should be provided. Other points of danger in the engine-room are the cranks and crank pits, and projecting ends of shafts.

There should always be plenty of space or "clearance" between the crank and the pit or frame in which it works. It is the custom with most makers of engines to make the cranks work as closely as possible to the edge of the pit or frame. This is always a source of danger. I have known several cases where hands and feet have been cut off, by being placed incautiously over the edge of the crank pit; and I am informed that during the present year, a man in charge of one of the engines in the "Inventions Exhibition" lost his hand from this cause. Cranks of engines should always be guarded. This remark will apply generally to cranks of steam-pumps.

Matters of much importance in an engine-room are space and light. In small factories especially these are often wanting.

The position of the engine-room sometimes makes it very difficult to obtain sufficient light. Where this is the case, I would recommend frequent whitewashing of walls and roof, and cleansing of floors and gangways. The floors of small engine-rooms are often of wood, and when greasy, the danger of slipping is very great.

Mill-gearing,

As defined in section 96, is required to be always kept securely fenced when in motion, or to be of such construction as to be equally safe as if it were securely fenced. This seems clear enough, and if carefully acted upon, many a horrible accident would be prevented.

Experience, however, and constant supervision are needed to detect whether the position of shafts, pulleys, or gearing-wheels is such as to render them as safe as if they were securely fenced. The other day some new people occupied a disused mill in my district; all the principal shafting was 20 feet above the floor, and apparently out of harm's way. Had there been careful investigation by the manager before the machinery was started, it would have been ascertained that in order to oil a bearing in the corner of the room, the engineer had to mount a ladder on to a platform, and step over a pair of bevel wheels. The result was horrible. One day the man slipped, was caught in the teeth of wheels, and torn to death. Another similar case which I had to investigate, shows how constantly watchful inspectors and manufacturers should be to detect points of danger. A horizontal shaft was fixed 30 feet above the floor, and more than two feet from the wall, in a spacious and lofty engine-fitting shop. Above it was worked a travelling crane. To reach this crane iron steps were secured to the wall, passing up between it and the shaft; and as stupidity would have it, these steps were taken up just at a point where there was a coupling on the shaft, with projecting bolt heads. One evening the man on the crane hailed a mate below to bring him some tools. The man below hurried up the iron steps, and, when passing between the coupling and the wall, his jacket caught on the projecting bolt heads and the life was whirled out of him in a few seconds. I mounted the other day to the top of a series of gas scrubbers. There I found an unprotected plank for a gangway, by the side of which were running a shaft and cogged-wheels all unprotected. Another source of danger from mill-gearing—and this I have found to be much the case in flour-mills—is the lowness of the overhead shafting pulleys, and gearing-wheels. No mill-gearing of this description is quite safe, unless there is a clear seven feet under its lowest part. I saw a man working the other day in a flour mill, under a pair of powerful bevel wheels. Had he raised himself to his full height, these wheels would have crushed his head off. They had been regarded as overhead wheels, and were left entirely unfenced.

Again, it has been urge upon me that shafting close to the ground or floor is not dangerous, but I have known a case where a man's foot was drawn under a shaft so placed, and lacerated, resulting in death from tetanus.

Much of this low shafting is met with in brick and cement works, where it is especially dangerous on account of its rusty condition. It is hardly necessary to speak of the pinion-wheels and clutches of rolls, for these I always find now securely fenced; but only a few years ago a boy, acting under orders from a foreman, lost his life through attempting to oil the necks of unfenced clutches, and I had to take proceedings for the recovery of penalties.

While on the subject of mill-gearing, I would draw attention to the dangerous nature of much of the shafting and pulleys in many large factories, and especially in saw-mills, running underground. In one very large factory in my district I found that almost all the machinery on the ground floor was priven by powerful mill-gearing underground. Men had to pass frequently in and out among this gearing, often stepping between pulleys and bands making, in some instances, hundreds of revolutions per minute and totally unprotected. Three bad accidents had happened. I strongly urged that openings should be made in the floor to each pulley and band, so that men could do their work without being obliged to step between them, and insisted that a guard should be placed over the shaft and pulleys. This has been done, the guards fixed being on the principle of revolving window-shutters, which can be

pulled up or lowered at will. This is a more expensive form of protection than most manufacturers can be expected to adopt.

Messrs. J. R. Collier and Co., of Bradford Street, Manchester, have forwarded me samples of their patent Flexible Interlink Wire Guards for Protection of Machinery in Motion—with an illustration of an engine enclosed with patent flexible interlink wire network, one portion of which can be drawn up and the machinery revealed, so as to allow the workman to get to the parts for oiling or repairs—which appear to me well suited for application as fencing for this class of mill-gearing. The arrangements are very simple:—A light iron framework surrounds the engine or machine, to which is attached the flexible network. Any portion of this can be brailed up or let down exactly on the same principle as a venetian blind; at the same time a constant inspection of the machinery can be maintained through the meshes of the wire-work. This description of guard is of special importance to mill-owners, and all those interested in machinery where young and inexperienced persons are employed, the simplicity of its arrangements admitting of its general application.

Where this or some other similar protection cannot be used, all underground mill-gearing ought to be railed off with stout wooden or iron rails, which should be placed at least a foot from the nearest point of possible contact, and a notice exhibited that no person is allowed to pass under the rail while the mill-gearing is in motion. Occasions will, of course, arise when the engineer will have to approach shafting and pulleys for oiling and other purposes, but even then, a long necked feeder will generally enable him to do this while standing on the safe side of the rail. It is, however, far better to use lubricators, which remove the necessity of oiling, except when the engine is standing. Where it may be necessary to put bands on and off, the rail should be made to ship and unship, and a fine inflicted when the rail is not replaced after the work has been done.

Open shafting and pulleys, when running under work benches, are another source of danger, and should be always protected.

When in charge of a northern district, a case came under my notice where a lad dropped a tool, which rolled under the bench; he stooped over the shaft to pick it up, when his neck-handkerchief lapped round the shaft, and he was strangled.

Another case occurred where a girl's loose hair was caught in a similar manner, and she was scalped as cleanly as by an Indian's tomahawk.

I would say, therefore, to all concerned in the safety of workpeople, —be suspicious of all mill-gearing until you have assured yourselves that it is securely fenced, or is *really* of such a construction and in such a position as to be equally as safe as if it were securely fenced.

Various Kinds of Dangerous Machinery.

Of all causes of accidents in factories the toothed or cogged-wheel is the most frequent, and yet no accident from such a cause should be possible. The mere fact of such an accident occurring should, *à priori*, be evidence that there has been neglect in watching over the safety of the workpeople. It, therefore, behoves an employer of labour in factories where steam or other mechanical power is used to direct special attention to all such wheels, and where, owing to their position, it is possible that the operatives may, in the pursuance of their work, or in passing backwards and forwards to their work, come in contact with cogged-wheels, there a guard should be at once provided. Such guards can, in

most cases, be very easily contrived, either in the shape of wooden boxes, wire guards, or shields of light sheet-iron.

In many cases, as in the change-wheels of lathes and mitre-wheels of drills, the protection must be so fitted as to be easily removed and re-fastened. There are many simple ways of doing this, which any practical mechanic will understand; but any inconvenience to workers at these machines should not be allowed to overrule the necessity for protecting these and similar wheels. In almost all cases this slight inconvenience is only felt at first, and passes away when the guard comes to be regarded as a necessary part of the machine. As an instance of this, I was *subpœnaed* to give evidence in the county court in a case where a lad's arm had been crushed off up to the shoulder. I showed how, by the use of a simple contrivance, such an accident would be rendered impossible. The lad lost his case principally through the evidence of workmen from the factory, who declared it would be impossible for them to do their work if my suggestions were adopted.

Three months afterwards all similar machines in my district, within my knowledge, were fitted with protection according to my ideas, whereby almost all risk of danger has been removed, and even the work itself accelerated.

It has been said to me, "If all this is true, why does not a Factory "Inspector use the power given to him, and insist on all such points of "danger being guarded?"

I reply: In the first place, the inspector has not always the power. Suppose, in the above case, I had served a notice on the occupier of the factory, *before the accident happened*, to fit the machine with a guard according to my idea, and he had appealed to arbitration under section 6 and sub-sections of the Factory and Workshops Act, I should most probably have lost the day. In the next place, it is my object to impress upon occupiers of factories that the responsibility of guarding machinery rests with them, and is not in the least removed from their shoulders by the appointment of Factory Inspectors.

It must be evident that it would be impossible for a Factory Inspector, unaided by managers and foremen of large works, to discover all the intricacies and out-of-the-way parts of the thousands of factories he has annually to inspect. He must have the co-operation of employers, managers, and workpeople if the safe-guarding of machinery is to be effectually done and maintained.

After the cogged-wheels, perhaps the most frequent cause of accidents are belts and pulleys; and I would remark, in the first place, that no young or inexperienced hands, and *no woman*, should ever be allowed to place bands on overhead pulleys, or on any pulleys or drums where the driving power is great; *and wherever it is possible to apply them*, I would recommend the use of fast and loose pulleys, not only because they remove the danger arising from the manipulation of the bands, but because in case of accident a machine can be so quickly and easily stopped. In the case last referred to, where the lad's arm was crushed, a man had to run round to the engine-room before the machinery could be stopped. Had the machine been fitted with a fast and loose pulley, it could instantly have been thrown out of gear, and the lad's hand only would have been injured.

When machinery is driven by outside pulleys and belts which are low enough to catch the arms or hands of any person stumbling, protection is absolutely needed, the best form of which will be a wooden box, or a wire guard, by which the pulley and lower part of the belt is enclosed. Before leaving this part of my subject, it would be well to

remark that various kinds of belt-lifters have been occasionally used for placing belts on overhead pulleys without the necessity of a man's hand going near the pulley, but if you can be sure of your man, I would rather leave the method of doing such work to him. as the use of the belt-lifter is not devoid of danger, for it has been known to catch between the belt and pulley, injuring the man using it and those near to him. Messrs. Dobson and Barlow, of Bolton, have patented a Safety Strap Shifter, which might be used with advantage in large factories and textile mills, where there is plenty of space for the machinery. An account of this strap shifter will be found in the *Textile Recorder*, 15th September 1885.

I am afraid that the operation of shifting belts must always remain one source of danger in a factory, against which it is almost impossible to provide; the greatest safety lies in only entrusting such work to steady and experienced workmen.

Loose belts should never be left hanging on overhead revolving-shafts. Numerous accidents have arisen from this cause. The belts also are subjected to a wear-and-tear, which should be avoided.

A belt or band when not in use should hang in a hook. When this cannot be done, it should at least be tied up out of the way. In one district over which I had charge, two lads lost their lives through playing with loose belts which had been left hanging on revolving shafts; and a little girl was dashed to pieces, having been caught in the bight of a belt which, when thus hanging loose, had suddenly lapped on the shaft. A case occurred in Yorkshire in 1867, when a foreman in a woollen mill, while splicing a strap lying on a shaft, got his smock hitched in the splice, and was drawn round the shaft, meeting with terrible injuries.

Accidents from the breaking of grindstones are, perhaps, the most serious in their results of any that occur from the use of steam-driven machinery in factories; but the prevention of such accidents, I feel, can be more properly treated by experts than, in a general manner, in a short paper dealing with the subject of accidents as a whole.

My experience in the Sheffield trades has not been great; the few accidents I have had to investigate from the breaking of grindstones have led me to the following conclusions:—To avoid such accidents, in the first place, be very sure that the governors upon your engine are efficient, and that the man in charge of your engine knows how to keep them so. A sudden acceleration in the speed of the engine, or anything like "a runaway" will be likely to wreck your grindstones. See that the stones are properly secured with plates, and no wooden wedges used, as these are likely to swell with the wet, and cause the stone to burst. Have the horses or saddles on which the men sit securely fastened in a proper position before the stones, and let a careful supervision be exercised that the grinders do not—as they will sometimes, especially when they have been observing "St. Monday"—accelerate the speed of the stones by changing the pulleys, in order to make up lost time.

Circular Saws

Must always, I fear, remain a source of danger to workers in factories, though the danger might be much reduced if the guard invested by my colleague, Mr. Lakeman (and which won the gold medal at the Health Exhibition), were more generally adopted. I have been informed by many occupiers of saw mills that this guard cannot be applied to heavy work, but the arguments are generally of the stereotyped kind—that

it hinders the work, and makes it even more dangerous than it was before; but I shrewdly suspect that if these guards could be fitted free of cost, or if, as I would strongly advocate, the makers of steam sawing machinery would turn out their saw benches ready fitted with these guards, we should hear nothing more of such arguments.

The following is a description of this guard taken from *Iron*, of August 30th, 1879:—

"The circular saw guard is an ingenious device for preventing accidents with circular saws, which require incessant watchfulness on the part of the operatives, or serious results may, and frequently do, most easily accrue. It is the invention of Mr. J. B. Lakeman, Her Majesty's Inspector of Factories, Central Metropolitan Division, who has presented it freely to the public in their interest, and has in no way protected it by patent right. From a lengthened experience of the many severe and fatal accidents arising from circular saws, Mr. Lakeman frequently suggested a fence, but was too often told that his ideas were Utopian. But upon representing the case to Messrs. Richard Garrett and Sons, of the Leiston Works, Suffolk, they generously set to work to perfect Mr. Lakeman's ideas, and have thus produced an effectual guard against accidents from circular saws.

"If we look to the numerous saw mills in the east of London, we find saws at work from the largest to the smallest size; benches are fixed in confined spaces; operatives employed at full speed all day long. We know that untrained labour is often exposed to risks from unfenced machinery, and in no case is the risk greater than from these saws. A few of the causes of accident may be cited. The flying of timber from under the saw (fatal results are known to have arisen from this); the recoiling of timber, whereby workers are struck in the bowels (fatal accidents have been caused hereby); a knot or extraneous substance hidden in the wood has flown out and cut sawyers' heads open; falling across blade of saw; slipping in sawdust, and in recovering one's balance the worker finds himself maimed as to his arm or hand; and, lastly, we have only to visit these places, where many workers will testify to the dangers of their occupations, as evidenced by the loss of fingers, hands, or arms. We have already observed that the guard is not patented, the invention being placed freely open to the world by Mr. Lakeman. The makers, Messrs. Richard Garrett and Sons, say they are believers in free trade, and can supply the guards at such prices, to users of circular saws only, as would exclude their being made by others.

"The apparatus is in its mode of fixing exceedingly simple. It is to be recommended on account of its simplicity, its cheapness, its immovability when fixed, and for its perfect freedom from being obstructive to the sawyer.

"The merits of the guard are as follows:—(*a*) No one can fall on the saw; (*b*) the sawdust is prevented from flying into the sawyer's face and eyes, a frequent source of danger; (*c*) the sawyer cannot reach with his hand over the blade of the saw (arms have been cut off by the catching of smock or shirt sleeves in the teeth of saws); (*d*) the wood it prevented from 'jumping' and striking the sawyer; and (*e*) the end of the plates of the guard being extended beyond the radius of the saw, and horizontal to the bench, men cannot easily place their hands close to teeth of saw.

"Messrs. Garret have written Mr. Lakeman as follows:—'We certainly live in no fear of losing our sawyers now, since they plainly tell us they will never use an unprotected saw again;' this is confirmatory and encouraging. It will doubtless prove highly gratifying to

Mr. Lakeman—and, in fact, to all others who are solicitous for the welfare of the operatives whose lives are in their own hands—to find that his endeavours to meet a real necessity prove successful. The invention is ingenious, and the spirit in which it is placed before the public most praiseworthy."

The underneath part of a saw-bench should never be left open, several bad accidents having resulted from this. In attempting to pick up a piece of wood which had dropped under the bench, a man's hand was nearly severed from his arm by the underside of the saw; and an accident, most horrible and hardly credible, happened recently in my district, when a man who had been at work at the saw-bench for 10 years had his head nearly divided by putting it into the dust-hole under the bench. Notwithstanding his experience, he apparently forgot that the same danger existed under the bench as above. Great care should be taken that in the neighbourhood of circular saws there are no irregularities in the floors, and that the gangways are kept as clear of obstructions as possible, and all "skylarking" should be put down with a firm hand.

The driving-bands and pulleys of these saws, when they are at all exposed to passers-by, should be boxed in, and in all cases fast and loose pulleys should be used with well-adjusted rigger guards. Some nasty accidents have occurred through people coming in contact with the up running exposed parts of band-saws. This part of a band-saw should always be protected by a sheath, which will not only prevent such accidents, but will act as a safeguard in the case of a saw breaking.

In joinery, brushmaking, and other works where wood is planed and shaped by machinery, care should be taken that the knives or cutters of moulding, tennoning, planing, chamfering, and other similar machines, should either be of such a construction, or in such a position as to be safe, or should be protected. In a brush factory, a few months ago, a man working at the chamfering machine reached over to the back of the guide-plate to pick up a tool, when his hand was fearfully gashed, because the back of the knives was not guarded. Guards can easily be constructed for the backs of such knives or cutters, which will allow of the shavings being thrown out at the side. A shield made of strong open wire-work, will, perhaps, be found most suitable for this kind of cutters. This will apply to all vertical cutters the backs of which are at all exposed and within reach.

Rolling and Crushing Machinery.

All mills or crushers in which any material is crushed or ground by rollers, armed with teeth, should be objects of special care. The danger in such machines arises from the method of feeding them, and from leaving them exposed to the persons employed in this process, or to passers by. The operation of feeding should be so performed that there is no possibility of the hand and arm of the feeder being drawn in. When such machines are fed from above, in all cases where it is possible, hoppers should be used of sufficient height to keep the hand and arm well out of reach of the rollers. In some cases, such as in the biscuit-crushers and rolls of india-rubber mills, an iron rail bolted on to the frame, and running across the front of such rolls, may be sufficient, but I should recommend a guard of sheet iron open in the centre for the passage of the biscuit and the jet of water. When a shovel is used, and a man stands on a platform or floor above the mill, the opening must be protected in such a manner as shall prevent anyone from slipping into it. I obtained statements of an accident which occurred three years ago in

a cocoa-fibre factory, where a lad fell, feet foremost, into a husk-crusher, and before the machinery could be stopped not much more than his head was left at the top of the rolls. This accident happened in the dinner-hour, when the machinery was left running, and was the result of "skylarking." For this class of crusher the hopper should be made as narrow at the bottom as is consistent with the passage of the husks from it into the rolls, and from the bottom of the hopper a flange should project, protecting the sides of the rolls.

In the case of rolls, where a man stands before them to feed, a table, wherever it is possible, should be placed in front, so that the material to be rolled can rest on the table before entering the rolls. This table will act as a guard, and prevent the man from bringing his hand too near the in-gathering side of the rolls.

The fly-wheels attached to some machines are often sources of danger owing to their exposed position near gangways, making it possible that the arm of anyone stumbling may be thrown between the spokes, and the same may be said of the driving-wheels of steam punches and shears. These driving-wheels of shears, &c., should be covered with a light sheet-iron casing. The fly-wheels of other machines may be treated in the same way, or, when they are of light construction, it may be sufficient to fill up the discs with wood, or even, as in the case of small printing machines, with stout millboard.

Steam Cranes.

My remarks as to the dangers to be met with here will, perhaps, apply with as much force to docks and warehouses as to factories, as the use of steam-cranes is quite as general in the former as in the latter.

Wherever they may be they should be examined, and *if it is possible* that the man in charge of the machine could in any way get his hand entangled in the gearing-wheels, they should be covered over with a metal shield.

A short time since, a poor fellow in charge of a steam-crane in my district, missed his hold of the lever handle, and before he could save himself his hand was clutched by the gearing-wheels, which were unguarded, and his arm was drawn out at the shoulder. He had the marvellous pluck to place his jacket against the terrible wound and walk unaided down six flights of stairs, and presented himself at the office for removal to the hospital, where he died in a few days. Such accidents ought never to occur, as these wheels can be *easily* protected.

General Remarks.

It will be a great point gained when the makers of machinery and the fitters of engines and mill-gearing shall come to regard the construction of fences and guards for all points of danger as a necessary part of their business, without which their work would not be complete.

What a number of accidents might have been prevented if this had always been done! The addition to the first cost of the machine would not be felt; but when you subsequently try to persuade a manufacturer, especially during the bad times that we have experienced lately, to incur some little expense in providing guards, he is often full of arguments as to the impossibility of applying them to his special branch of trade, and as no accident has occurred in his works he refuses to see the necessity of the suggested protection. The next week, perhaps, the accident does happen, and the manufacturer, if he has a conscience to be touched at all, will during the rest of his life be troubled with the remorseful

reflection that a man was cruelly done to death by his refusal to recognize fully and fairly his responsibilities as an employer of labour. Before concluding, I have a few general suggestions to make.

1. Do away as far as possible with all projecting keys on shafts, set-screws on drilling-machines, and bolt-heads on couplings; the latter may be generally counter-sunk. A boy in Birmingham was killed on the set-screw of a drilling-machine.

2. If you cannot cut off all long-ends of shafts and spindles where they are in such a position as to be a source of danger to passers-by, provide them with caps or boxes. Since commencing to write this paper a lad has lost his arm in a factory in my district, through some stuff he was carrying catching on the projecting end of a shaft.

3. Have the main-shafting driving the machinery in each shop provided with a pair of fast and loose pulleys, or fitted with clutches, so that in the event of an accident all the machinery in the shop can be at once thrown out of gear and stopped. A means of instant communication should also be provided between each shop and the engine driving the machinery in it.

4. Don't drive too much mill-gearing from one engine. Several small engines are safer than one large one, and are generally more economical.

5. Want of sufficient space for machinery to work in is the cause of many accidents. Endeavour so to arrange your machines that there shall be fair gangway space, and allow no obstructions to remain in these gangways.

6. All unevenness in floors should be carefully avoided. Numerous accidents occur from people tripping and stumbling on uneven floors. This is very important in foundries, where men have to carry pots of molten metal. Shocking burns have occurred from the gangways not being kept even and clear of obstruction.

7. In some processes it is impossible to keep the floors clear of oil and grease. Here a supply of sand should be provided and sprinkled over the floor as required.

8. Put down with a firm hand all "skylarking" during work hours, and punish any persons rambling away from their work into parts of the factory where they have no business.

9. Where girls or women are employed near machinery, insist on their hair being neatly fastened up in a net, or otherwise, during working hours. All workpeople should be cautioned against wearing loose or ragged clothing.

10. Be careful that when guards are removed from machinery for repairs or other purposes, they are always replaced before the machinery is started.

11. Let there be as much *light as possible* everywhere. Frequent limewashing is economical in the end.

12. Co-operate with your Factory Inspector, and, when necessary, seek his assistance in carrying into effect the regulations for the safety of your people.

Mr. J. Jones, H.M. Inspector for Devon and Cornwall, observes :—

"In this district I find occupiers generally very anxious to carry out any suggestions I make with regard to fencing dangerous gearing and machinery, and I have not found it necessary, so far, to recommend proceedings against any firm under this head.

"A circular, issued by the Home Office addressed to makers of flour mill machinery, to the effect that more care should be taken to protect small counter shafts and wheels on their machines would, I think, be a means of preventing minor accidents. Some makers deliver their machines without any pretence to a guard.

"The most pronounced overcrowding is in flour-mills which have been converted from the old system to roller milling. Machines in some of the mills I visit are so cramped that fencing is practically an impossibility, and locomotion where one has to squeeze one's way between machines, is attended with a certain amount of risk."

Mr. Beaumont, H.M. Inspector for the Bradford district, observes :—

"Hoist accidents still continue to be too numerous, though in this district the fencing is generally good. A very useful hoist-guard has been brought out by a firm of engineers in Dewsbury, Newsome Company, of Anchor Forge.

"There is, I think, a desire on the part of machine makers, to well fence the machinery they turn out, and one of the chief causes of accidents is the habit of 'cleaning when in motion.'

"I have given considerable attention to the fencing of all machinery, and I am glad to say there is a decrease in the number of accidents in this district."

Mr. Cameron, H.M. Inspector for the Central London district, remarks :—

"With reference to the fencing of dangerous machinery, I have been struck by the excellent precautions which have been taken in many factories under the instructions of my predecessor in the district—Mr. Lakeman. The use of gas engines is very common. The fencing of these has always presented some difficulty owing to the persistence of occupiers in regarding as sufficient protection a simple partition, which, although isolating the engine, leaves it practically unfenced so far as the attendant is concerned. The single rail round these engines sometimes adopted is, in my view, likewise, quite insufficient. Wire guards, now largely in use, can be made easily moveable. They do not interfere with access, and are a real security. Once put up, I find that they invariably give satisfaction.

"I have found great willingness among occupiers to carry out my instructions as to fencing generally; but I regret to say that there continues a seeming incapacity to grasp the real use of guards. Expensive railings are put up round a steam engine at a sufficient distance from it to entirely prevent easy access to the various parts. Consequently the engineer having to oil bearings, &c., gets inside the expensive railings. And so, too frequently, with other and all classes of machinery, guards are put up with excellent intention to protect which only accentuate the absence of protection. I cannot express too strongly my opinion as to the importance of *thorough* fencing; such fencing as will admit of easy access to all parts of a machine in perfect security. After such fencing has been put up, it almost always pleases both masters and men, though I must admit that the operative is often a sturdy opponent of additions which may call for the slightest alteration in routine."

Captain Kindersly, H.M. Inspector for the Edinburgh district, observes :—

"With reference to the fencing of machinery, I have only to remark that I have no trouble in getting this important point attended to by employers.

"After nearly 22 years experience as a factory inspector, during 19 of which I have had sole charge of the South-Eastern District of Scotland, I cannot recall a single instance of an employer refusing to fence any mill-gearing or machinery for which I had suggested protection. On the contrary, I have always found that employers are not only willing to attend to my suggestions, but are most anxious to have any defects or omissions in such matters pointed out to them.

"As they have often said to me:—We have nothing to gain by leaving a fly-wheel or dangerous piece of machinery unfenced, but in the press and hurry of business these things are sometimes overlooked or escape our observation till pointed out to us by the inspector."

Mr. Richmond, H.M. Inspector for the Liverpool district, has forwarded the following information :—

"Accidents.

"285 accidents were reported to me during the year, of which 51 proved fatal. These latter may be classed as follows :—

Fatal Accidents.

Quarries	18
Chemical works	11
Sugar factories	7
Glass works	2
Engineering works, &c.	5
Wood works	3
Breweries, &c.	2
Fancy box factory	1
Brick works	1
Biscuit factory	1
Total	51

"Of the fatal accidents at quarries, seven occurred through falls of stone, &c., four from the men themselves falling, three from waggons, one from a crane, one from blasting, one from machinery, and one from falling into a lime kiln.

"One quarry was responsible for five deaths, one for three, and three for two.

"Of the fatal accidents at chemical works, six were caused by men falling from a height, and three by waggons in motion.

"Of the seven fatal accidents at sugar works, three were caused by hoists, and one by a windlass through the handle reversing for want of a 'catch.'

"Of the remaining fatal accidents two were caused by circular saws. Of the whole 51 fatal accidents only nine were in any way connected with machinery.

"Among the 234 non-fatal accidents the most notable are—

Tin-stamping machines - - -	8
Steam brick presses - - -	15
Circular saws - - - -	18
Hoists - - - -	10
Quarries - - - -	16, half of which were from blasting.
Chemical works - - -	40, of which 19 were from machinery, 16 from scalds and burns.
Soap works - - - - -	12, eight of which were from machinery.
Explosion,—escape of gas, steam, or metal - - - -	18
Various, chiefly slight from machinery	97
Total - - -	234

Mr. Woodgate;—

"With regard to accidents in this district, I am glad to report a very appreciable falling off in the number. This I cannot but attribute to the increased vigilance we are now required to exercise in getting the smaller parts of machinery guarded. As a rule, I find the occupiers anxious to carry out what is required. There will, of course, always be exceptions. Some of them argue, as they have never had an accident, they do not see why they should trouble to put up guards, but with the exercise of firmness and determination I have found them all amenable. In every case where I have had occasion to prosecute for neglecting to guard I have always found the Bench in thorough accord with the requirements of the Act of Parliament."

Mr. Hoare, H.M. Inspector for the Wolverhampton district, remarks:—

"*Accidents.*—The total number of these has not increased, but I am sorry to say the fatal ones have from, I think four, to nine. The nine are made up as follows:—

1. A link to a wire rope at a quarry broke, allowing a truck of stone to break away down an incline, one piece of stone struck a stone breaker, causing fatal injury.
2. A printer fell into a pulley, probably in a fit.
3. A lad of 15 in attempting to oil machinery, contrary to orders, it being no part of his work, became entangled and was killed.
4. A man was scalded in a brewer's copper. He probably got into a full copper in mistake for an empty one.
5. A man fell from a ladder which he had placed carelessly.
6. A man was struck by a piece of wood thrown from a circular saw.
7. A small piece of iron burst from the blade of a shear, causing a fatal wound in the throat.

8. A man fell from a boiler.
9. A man was run over by a truck.

"Not less than two out of every three minor accidents are caused by the workers' own negligence. It is therefore of immense use that work-people should join with their masters in insuring themselves against all accidents; it is wonderful how much bad feeling is saved by this between employer and employed.

"*Fencing Machinery.*—I find employers both willing and anxious to do all they can in making their machinery as safe as possible, but workmen appear to be careless, nay, almost reckless, in the risks they will voluntarily run when using it. Gas engines continue to increase in popular favour, they save labour and are both clean and economical in use, provided proper care is taken of them during severe weather; for want of this many suffered damage during the severe frosts of last winter.

"The Great Western Railway Company, who fence their machinery with the greatest care, have adopted a moveable rest for the tool to rest on when it is being ground. This rest by being placed quite close to the stone renders it impossible for the finger to get ground if the tool slips, a no uncommon occurrence."

Mr. Maitland, H.M. Inspector, late of Preston, but now of Bristol, remarks:—

"During the 20 months I was at Preston a number of accidents from flying shuttles were reported to me, most of which I investigated. The majority of persons injured were struck in the eye, and in some cases loss of sight ensued. My attention was drawn to a shuttle guard invented by Mr. Timothy Yates, of 33, Richmond Street, Preston, himself a practical weaver. It consists of a light steel rod jointed to the front of the slay cap, and standing over the shuttle-race, being so arranged that upon anything coming in contact with it from the front, it gives way upon the slightest touch against the pressure of a spring, but upon the shuttle or any other object coming in contact with it from underneath, it is held firmly in its place, and prevents the possibility of the shuttle rising. It is considered by experts to be the best, simplest, cheapest, and most effective shuttle guard extant, and, when once attached (which takes not more than 10 minutes) it is practically impossible for it to get out of order.

"It is both simple and cheap. At my request this guard was tried at a number of factories, and, as a rule, gave satisfaction to both managers and weavers.

"Having been such a short time in the Bristol district I do not feel qualified to offer any remarks on the way the Act is observed here and other matters relating thereto, but in justice to my predecessor, Mr. Johnston, I should like to say that the fencing of engines and machinery is the best I have seen in any district I have had, and is evidence of the care and attention devoted to that most important point."

Captain Smith, H.M. Inspector for the Sheffield district, observes :—

"By your instructions we have lately inspected windmills. My experience in these is too limited to speak with authority, but the wheels that strike me as being the most dangerous are those on top of the mill known as the crown and break wheels. Millers admit that they are dangerous, but have not seen their way to fence them, as fencing was considered (and might have been) in the way, when the top or cap of the mill revolved. I have suggested, and many millers have adopted the suggestion, to fix a wedge or V-shaped piece of solid wood to the beam above the wheels which traverses with the cap. This wedge goes close to the wheels on the *in*-taking side, is efficient as a guard, and does not go low enough to prevent the cap of the mill traversing when the wind changes.

The importance of having appliances to stop the steam engine speedily is unquestionable, and any improvements facilitating the operation are very valuable.

Captain Smith, R.N. has sent me the specification of an invention of Mr. Clarke's, which he has seen in use in the works of Messrs. Ibbotson Bros. & Co., Globe Steel Works, Sheffield, and which he considers might be of great value in that district.

The specification of the invention given by Mr. William Clarke is as follows :—

"My invention relates to steam and other motive power engines or their equivalents in which the said engines may be stopped by the cut off of the motive power and is so designed that any persons be they skilled in mechanics or otherwise, can in case of need and at a moment's notice bring the said engines to a standstill from any part of the building or works in which the said engines may be working.

"I preferably control or stop the said engines or their equivalents by means acting directly on the governor valves but I may, if it be found more convenient, control or stop the said engines by means of any existing valve or by a valve specially made and placed in the most desirable position.

"According to one form of my invention I operate on the governor valve by means of a falling lever and weight as shown in Fig. 1. To

any design of governors A I attach a bracket or frame B in such a manner that it shall form at the point C a suitable bearing or guide D through which the central valve pin E of the governors A may be produced and revolve freely. Affixed to, or in one piece with, the aforementioned bracket or frame B I form in the most convenient position preferably as shown in Fig. 1 the standards or guides F, G. By means of the pin or bolt H I pivot or hinge to the aforementioned standard or guide F a lever I which passes through a slot J provided for the same in the aforesaid standard or guide G as is shown in Fig 2. In such a position that it shall be directly over the centre of the aforesaid central valve pin E I form on the aforementioned lever I a boss K and to the unattached end of the lever I I affix a weight L sufficiently large and in proper position to overcome by a combination of leverage and its own weight all resistance which may be brought to bear against the aforesaid lever I in its action resulting in the closing of the governor valve.

"By means of the pin or bolt M I hinge or pivot to the aforementioned standard or guide G a swing or other catch N which is so formed that in its inoperative position it will support the aforesaid lever I so that the same may not in any way interfere with the free and independent working of the aforesaid governors A.

"It will thus be seen that presuming the lever I to be in its supported and inoperative position and that from the many known causes the governors A should cease to perform their work and the engines should (what is technically known as) run away, it will only be necessary to release the aforesaid catch N when the lever I will fall and the boss K bearing upon the central valve pin E, and the lever I being as before mentioned weighted to overcome all resistance, the said lever I will immediately close the governor valve and consequently shut off the motive power, when it must follow that the engine or its equivalent will be brought to a standstill.

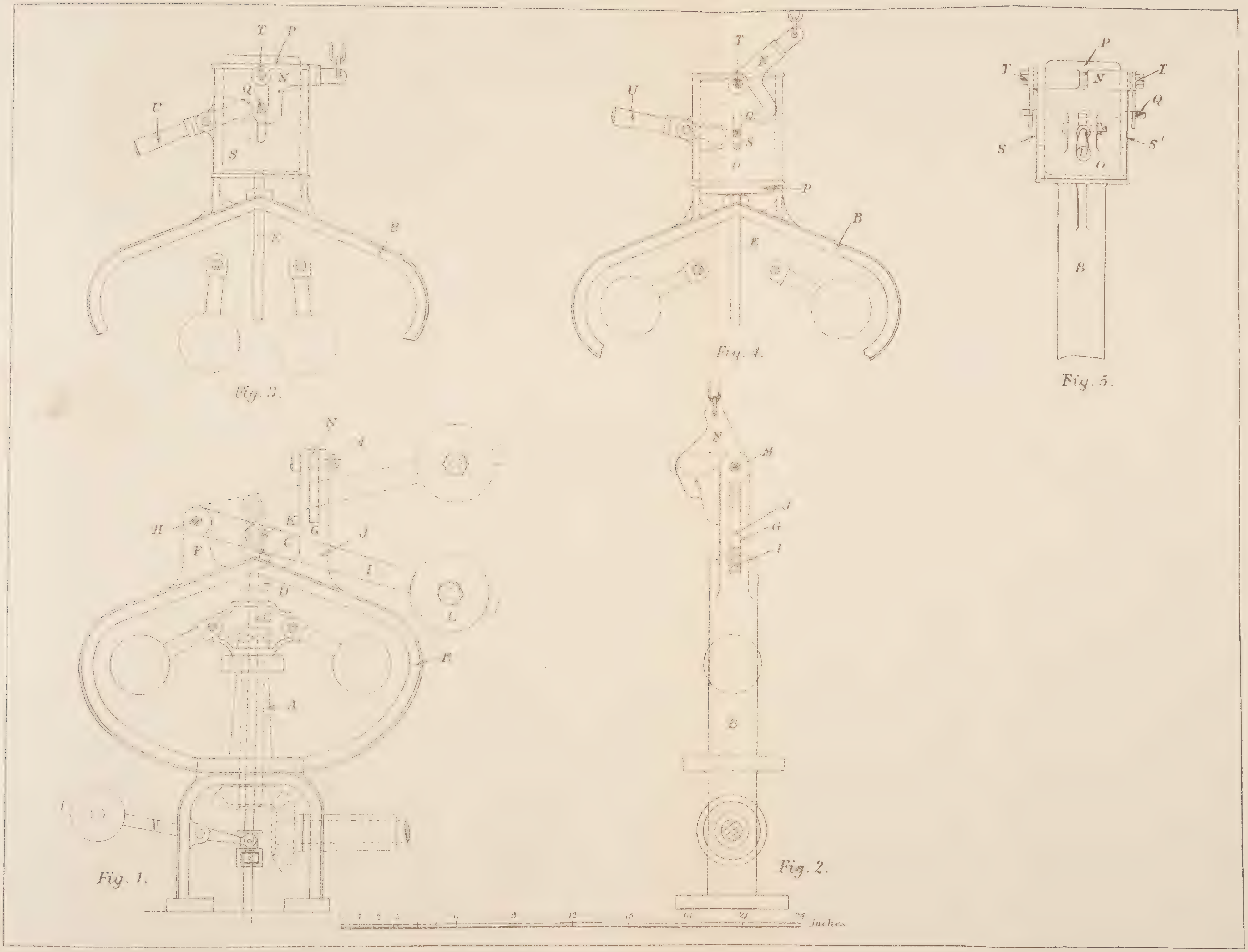
"According to another form of my invention I close the governor valve by means of a falling weight acting directly on the central valve pin as shown in Fig. 3.

"To a suitable bracket or frame B I attach or make in one piece with a case or frame O, preferably cylindrical, enclosing a weight P which is free to be raised or lowered at will. A bolt or pin Q is made to pass through the weight P and through suitable slots S. S^1 provided in the case or frame O and extending beyond the aforesaid case or frame O to any desirable length. By means of the pin or bolt T I hinge or pivot the swing or other catch N which is so placed that while engaged with the aforesaid pin or bolt Q it will support the weight P in its inoperative position so as to allow of the free and independent working of the governors.

"It will thus be seen that by releasing the aforesaid catch N the weight P will be free to fall and coming in contact with the central valve pin E will operate on the governor valve as heretofore described for the arrangement shown in Fig. 1.

"For convenience in raising the weight P when it is desirable to restart the engine or its equivalent I provide suitable means either by hand lever U or otherwise as may be found most convenient.

"It is obvious that I may prefer to operate on the valve by other means than those herein illustrated, for instance I may, instead of using the lever I or the weight P, release in the same manner or otherwise a



Wyman & Sons, Ltd Lith 5730. 3. 94.

spring which will have the same effect in closing the valve without departing from the nature of my said invention.

"According to my invention I may release the said operating weights, levers, springs, or their equivalents, either on the engine itself or at any distance from the said engine, preferably by means of chain, cord, or wire communicating with all parts of the works where it may be considered necessary, and being operated by hand, or I may employ means, either electrical, automatic or otherwise without departing from the nature of my said invention.

"While preferring to operate directly on the governor valves I do not by any means limit myself to the said method, but may suspend a suitable valve in any convenient position in the connections or piping of the said engines or their equivalents which may be released in a similar manner to that already described herein.

"I also introduce into my said invention a combination of special valve and governors as shown in Fig. 1. for use with or without the aforesaid falling weight, springs or their equivalents by means of which combination I make the governor valve not only act in its own capacity but, as an instantaneous stop valve and to enable me to more effectually and rapidly carry out the purpose for which this invention is designed, I may automatically or otherwise apply a brake to the fly wheel; but for this I make no claim.

"Fig. 1 is an elevation of a special form of governors with my apparatus for controlling the engine or its equivalent by means of lever and weight showing the said lever in its inoperative and operative positions.

"Fig. 2 is an end elevation of the same.

"Fig. 3 is a part elevation of a special form of governors with my apparatus for controlling the engines by means of direct falling weight showing the weight in its inoperative position.

"Fig. 4 is an elevation of the same showing the weight in its inoperative position.

"Fig. 5 is an end elevation of the same showing the weight in its inoperative position.

"Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is

"The closing instantaneously by any means of the governor valves, special, or existing valves, either on the engine itself or at any distance from the said engine for the purpose of effectually shutting off the motive power of the said engine or its equivalent."

Captain Bevan, H.M. Inspector for the Nottingham district, observes :—

"Accidents in my district, so far as they have come to my knowledge have been comparatively few during the last 12 months. Only three fatal ones have occurred, one from the bursting of a grindstone, one from a fall of clay in a brickwork, and the last from putting a belt on a pulley with engine running at full speed, all of which might have been prevented had more care been exercised by the deceased. Many occupiers of factories seem quite unaware that they should report certain classes of accidents, and prosecutions do not act as a warning, many accidents only coming to the knowledge of the Inspector through the injured person being taken to the hospital and coming under the charge of the surgeon.

"*Fencing of machinery.*—I find that greater attention is being paid to fencing generally; in the lace machinery safeguards are now in general

use for dangerous parts thereof, and the machine makers send out new machines so supplied. I have always found it beneficial to ask the makers to guard exposed wheels and gearing, such guards being of a better pattern and of more substantial construction than those made by the local carpenter or tinman.

"In Nottingham several manufacturers of aprons and blouses have adopted power for driving sewing-machines, and great trouble is saved by the makers erecting the machinery and shafting ready fitted with well designed fencing, and so placed that it does not interfere with or impede the hands in their work.

"A fatal accident occurred during the year to a man who was engaged putting a belt on a pulley attached to the main shaft when the engine was running at full speed. This happened in a large factory where some 20 tenants occupy rooms, which tenants have no control over the engine, and in case of such an accident, have no means of immediate communication with the engineer. I have seen in one of the factories in my district, an arrangement by which the engine could be stopped almost immediately from any room in the factory by means of a chain attachment acting on a weight in the engine house, the release of which weight would stop the engine. I think it most desirable that some such means should be adopted in large factories containing many tenants who rent room and power."

Mr. Knyvett, H.M. Inspector of Factories, Birmingham, remarks :—

"I have devoted much attention to impressing on manufacturers the advantage of having weighted basins to hold the lacquer in lacquering shops; a fatal accident occurred through the upsetting of a tin pot containing lacquer, in close contiguity to a stove. On making this a point for special investigation, I regretted to find that, very commonly, enough care was not taken in this respect by manufacturers.

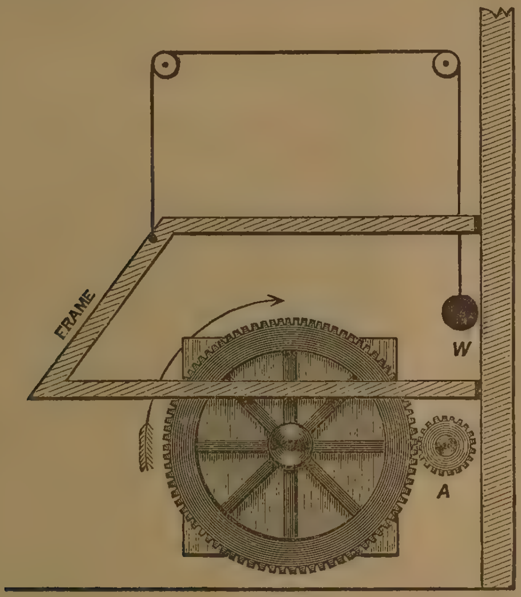
"*Fencing.*—I have made enquiries as to the comparative advantage, or risk, attending the fitting of a semi-circular wrought iron guard, to emery wheels, which might hold the fragments, in case of a fracture: and I was pleased to learn from Mr. Prior, the brother of my colleague, who is a partner in a large firm of stove range makers in Birmingham, that guards of this sort had been used at his works, and had successfully held the broken wheel.

"*Accidents.*—I have before me the report of a recent statement made by a very distinguished member of Parliament, Mr. John Burns, that 'during the last ten years, notwithstanding it had been said by one of 'the inspectors that matters were improving, he found that there had 'been an increase in accidents and deaths of 15 per cent. over the 'condition of ten years ago.' Well, Sir, these are, as it appears to me, very serious charges against either the efficiency of the Act, or of its administrators; but I would suggest to you that the increase of figures, alluded to by Mr. Burns, is merely an indication (like the increase I quote below respecting overtime) of the improved working of the Factory Act and that the misery and trouble alluded to by Mr. Adderley are being disclosed more and more, owing to the increased scope and power of State inspection."

Major Roe, H.M. Inspector of Factories, Birmingham, observes :—

"With reference to plans for fencing particular machinery, perhaps the following may be considered useful.

"*Fence for Shaking Barrels.*—The hand sketch represents a square shaking barrel turning in towards the wall, the gearing being cogwheels acting at A. The fence is a frame of wood hinged to wall and acting on pulleys with a counterweight W. It is raised and lowered therefore with the greatest ease and cannot be removed.



"*Gas Engines.*—The starting of gas engines is still a difficulty although there are several plans in use to do so by means of the explosion of the gas, but the extra cost seems to stand in the way of their general adoption, and the starting of the engines by pulling round the flywheel by hand is the common practice, necessitating the removal of the fence to the fly-wheel for the operation.

"The plan of a clutch attached to the shaft of the engine, and the insertion of a lever, as reported by me some years ago, does not seem to gain ground, although where it has been adopted it has been approved of and the fly-wheel can be permanently fenced.

Many accidents result from falling against and getting an arm or hand through a small pulley or fly-wheel of a machine the worst consequences of which can be avoided, by filling up the spaces between the spokes, and it has frequently struck me that the machine makers would turn out their machines very much safer, if these wheels were made with discs of metal intead of spokes. I am told by engineers that the wheels would be stronger, and more cheaply made if this were done. Perhaps with a more stringent Employer's Liability Bill in force, the ingenuity of machine makers, will be called into requisition by the users in future, and many small cog-wheels, &c. of machines be then fenced by the makers, instead of leaving this to be done after some injury has occurred, or the inspector of factories has seen the machine, perhaps months after its being in full use by a manufacturer entirely ignorant of machinery and its dangers.

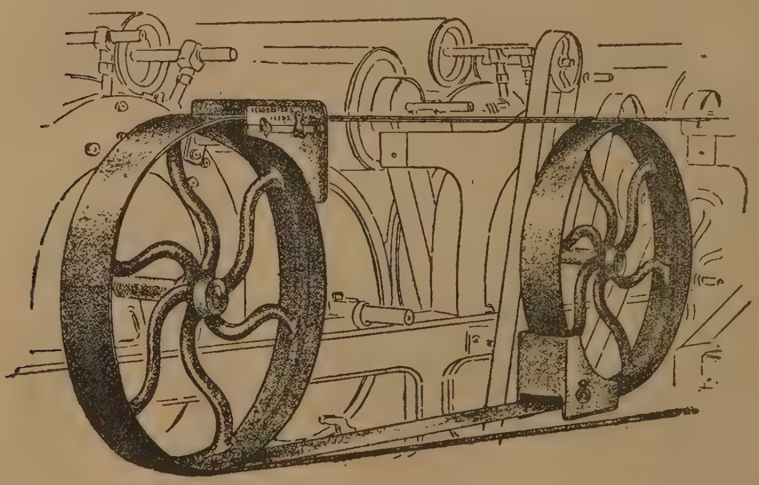
"*Accidents.*—The number of accidents in my district has diminished this year from that of the previous one, from 130 to 109.

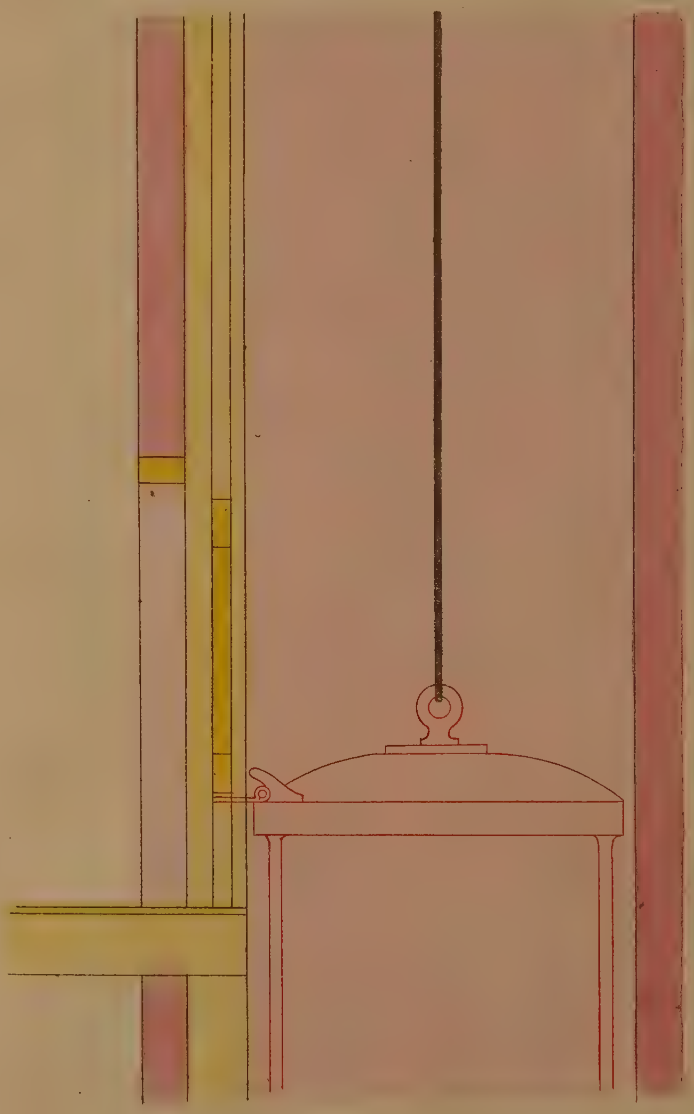
"There have been six fatal accidents but only one from machinery, the others being from drowning, falls and scaldings or burns.

"One young girl was killed by overbalancing herself when sliding down bannisters in a building open to the public. I recommended knobs being fastened on these bannisters at intervals which I have found prevents this sliding. I think they should be fixed to all such bannisters, when the staircases are open to the public and there is a well, down which anyone is liable to fall."

Mr. Prior, H.M. Inspector of Factories for the Huddersfield district, observes :—

"A provision of the Act of 1891, which, in section 37, enacted that the expression 'machinery' shall include any driving strap or band has greatly simplified our duties in dealing with dangerous driving belts. On November 2nd, 1892, I received from H.M. Superintending Inspector instructions that in my district all side straps of scribbling and carding machinery are to be fenced. This work has since taken up a great deal of the time of my colleague and myself, and, although incomplete, is progressing satisfactorily. Many serious and even fatal accidents have been caused by unguarded side straps. Persons whose clothing has been caught by the strap have been drawn around the pulley and dashed violently against the floor, a column, or an adjoining machine. Some dissatisfaction was at first caused by the introduction of this guard, but this is gradually disappearing, as it is becoming generally understood that its adoption being the rule no one will be unfairly handicapped ; and many employers since they have begun to use it declare it to be really a labour saving invention, as their work-people can now move about between these straps with far more freedom than they formerly could. I append a sketch of a pair of one of the best designed of these guards, invented by Messrs. Leadbeater and Sons, of Dorrington Road, Leeds. It will be seen that the upper rim of the top guard is hinged, and can readily be lowered to allow the strap to be removed and replaced when required.





TOP STORY.

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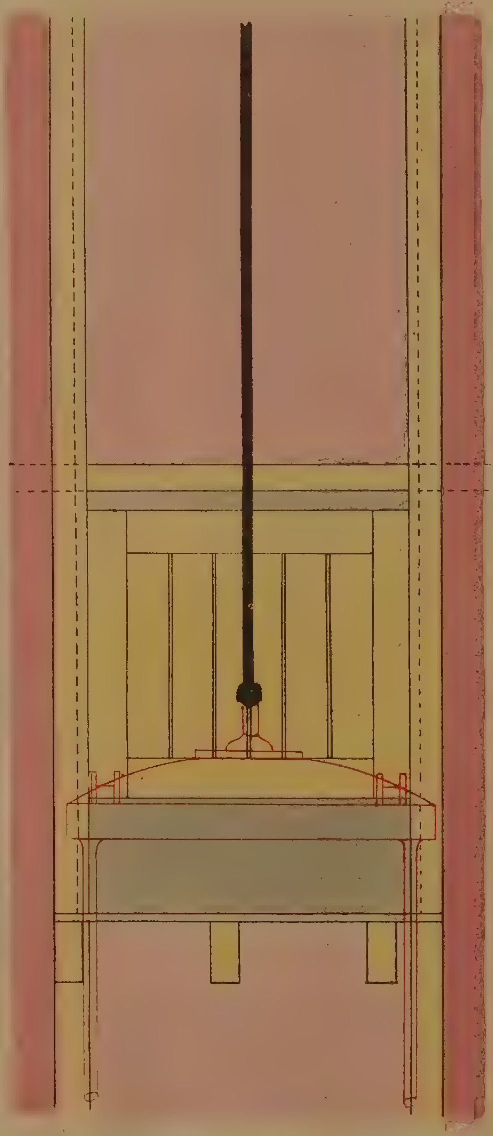

TOP STORY.

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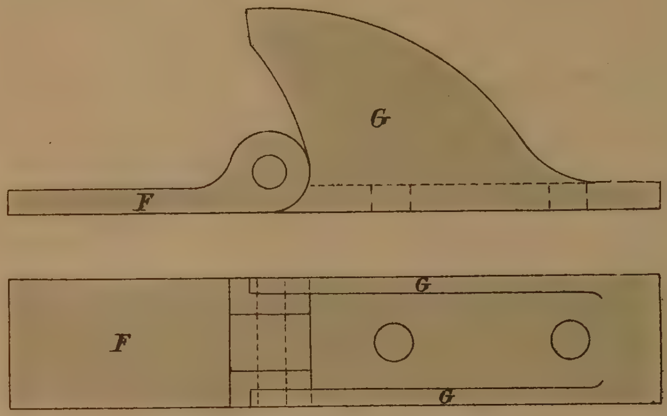
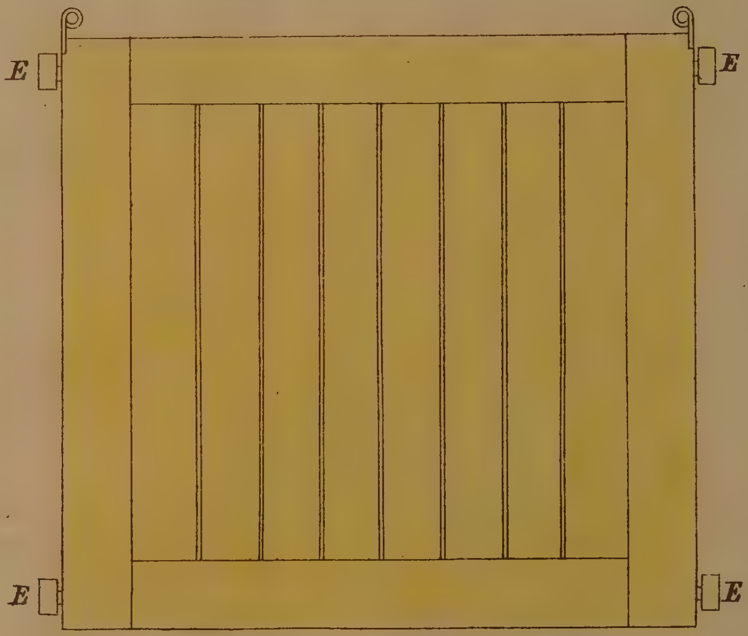


SHUTTER LIFTER.
TO BE FITTED ON TOP OF CAGE



SHUTTER FOR INTERMEDIATE STORIES.
WITH ROLLERS TO RUN PAST THE BENDS
IN THE GROOVES.

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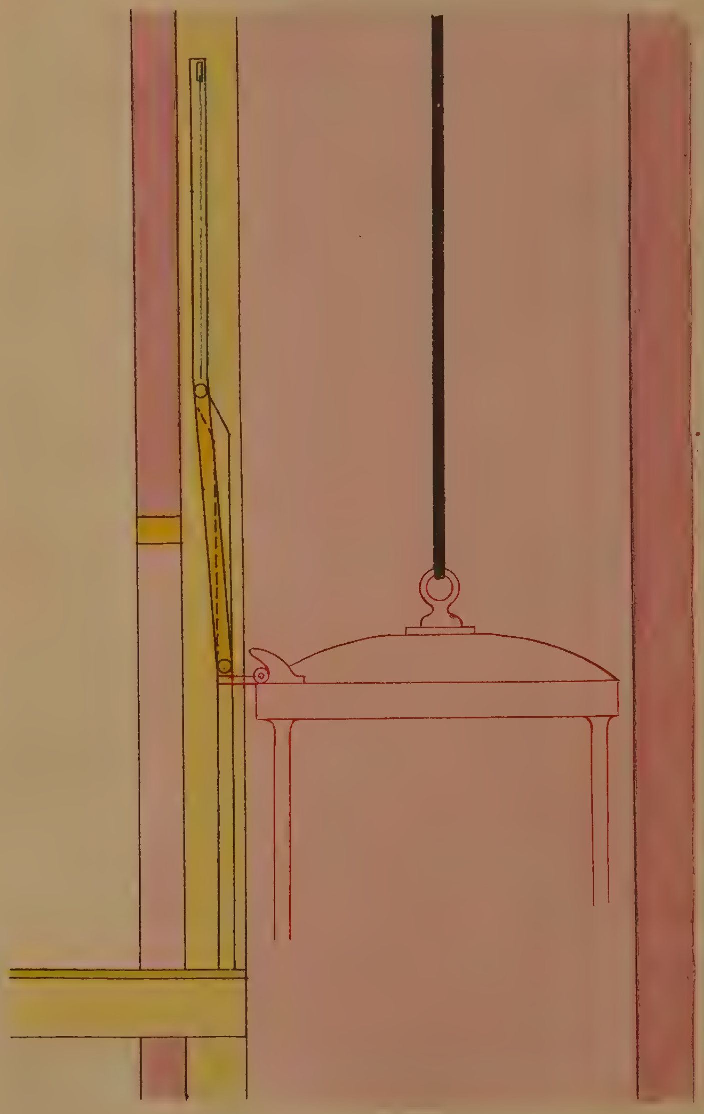

INTERMEDIATE STORY.

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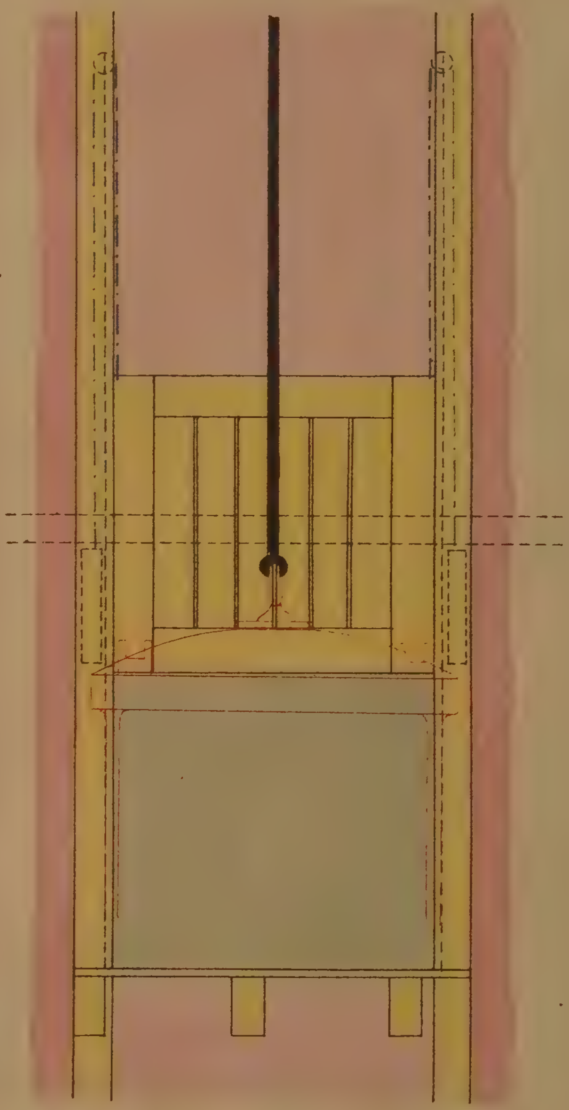

INTERMEDIATE STORY.

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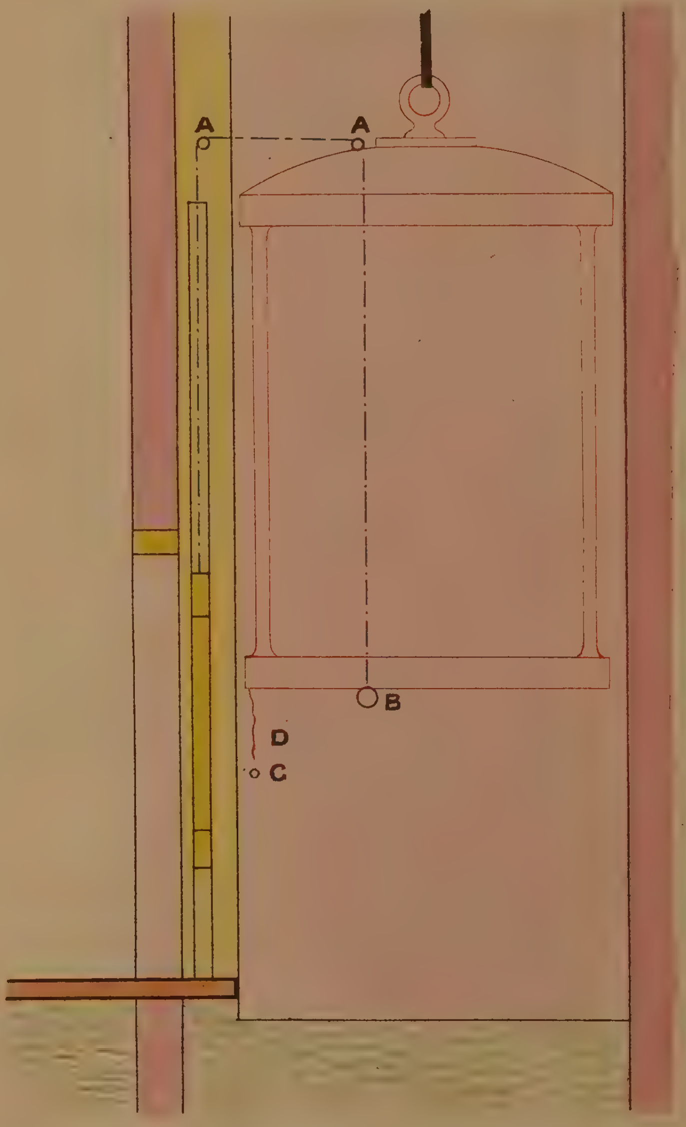
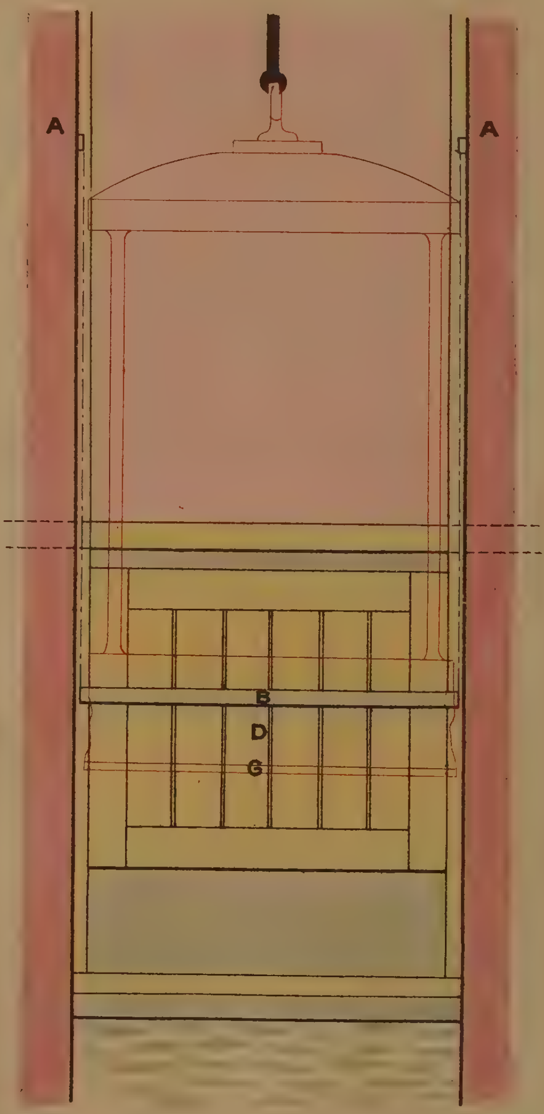


BOTTOM STORY.

Wyman & Sons, Ltd, Lith. 5730.2.94.



BOTTOM STORY.

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"AN UNPATENTED AUTOMATIC HOIST-GUARD.

"One of the questions which received the attention of the Legislature in 1891, when they were engaged in amending the Factory and Workshop Act, 1878, was that of fencing hoists, and the danger resulting from unguarded hoists was so apparent that Parliament amended that part of the fifth section of the Act of 1878, which requires the fencing of 'every hoist or teagle *near to which any person is liable to pass or be employed*' by repealing the words in italics, and thus making compulsory the fencing of every hoist or teagle.

"In endeavouring to give effect to this legislation, H.M. Inspectors are often puzzled to know what to do with fencing, which is evidently designed rather to comply with the wording of the Act than to ensure the safety of the workpeople. Doors which require opening and closing every time that the hoist is used are frequently found open, and shutters which should be lifted and lowered again when the cage leaves the landing are often found fixed up by a nail or peg some six feet above the floor level. Persons in authority pass these unprotected and dangerous openings without comment, and when their attention is invited to the subject by an inspector, they grow eloquent in condemning the carelessness of their workpeople.

"I believe that I shall express the unanimous opinion of the staff when I say that there are only two methods of securely fencing hoist openings, either that every door should be locked or otherwise secured, so that it can only be opened by a person travelling in the cage and entrusted with the sole charge of the hoist, or that each landing should be secured by a guard automatically opening as the cage approaches the floor level, and closing as it departs. If the apparatus is self-locking, additional security is thereby obtained. But in comparatively few mills is there sufficient work for a hoist to keep a man fully employed in raising and lowering goods. In a few works I have visited the hoist is only used at certain specified hours of the day, when the man in charge is present to attend to it. This arrangement is not applicable to many industries, and where the workpeople indiscriminately use the hoist when it is at liberty, the adoption of an automatically acting guard is very desirable.

"It is easy to attach automatic guards to the top and bottom openings of a hoist, and my only excuse for giving sketches of a way in which it may be accomplished is the fact that simple arrangements of this kind are often very imperfectly understood when verbally explained by an inspector, who finds when subsequently visiting that something has been attached at perhaps double the necessary cost, which does not always do its work properly.

"Automatic guards for intermediate openings are, however, more complex. A number of clever inventions have been introduced, but they are usually patented, and their cost places them beyond the reach of many firms whose workpeople are thus, through the want of a cheap automatic guard, exposed to danger.

"I recently saw in use a comparatively simple automatic intermediate guard, and having learned that it was not patented, and that its owners had no intention of patenting it, by their kind permission I have obtained a sketch of it, which with some modification is here introduced. It is not claimed for it that it is superior to, or even equal in merit, to some of the patented guards in use. It does not, except in mills with lofty rooms, entirely close an opening so as to prevent anyone leaning over and looking down; it is not self-locking; it does not raise the shutter when the cage is descending, but when the shutter is raised

either by the cage or by hand it automatically descends as the cage leaves the floor level, and it is thus infinitely preferable to the doors, sliding shutters, or bars which require attention on the part of the persons using the hoist before the opening is guarded. Its chief merit is that it is so simple and so cheap that it can be applied by any firm, that it can readily be constructed by any joiner and smith, and thus its adoption by firms unable to obtain more costly and elaborate appliances would prevent many sad accidents which we now deplore.

"To automatically guard the bottom opening of a hoist we use a shutter, hung with cords running over two pairs of pulleys marked A. These pulleys are not fixed as they would be were the shutter hung with sash weights, but are turned around, so that the cord passing over a pair of them hangs down at the outside of the cage. When the cage is raised a bar like a trapeze bar, B, is fastened to the ends of the two cords, and thus, when the cage descends, it depresses the bar and raises the shutter, and as it ascends the weight of the shutter causes it to descend to the floor, and closes the opening.

"Although my sketches show low shutters they should be made as high as the hoist openings if the rooms are lofty enough to allow the shutters to rise above the openings; but where the headroom is restricted, and a low shutter is necessarily used, there is always a danger attendant on persons leaning over the shutter when the cage is descending. To To obviate this, in the sketch of the bottom opening I have shown a bar or lath, C., attached to the bottom of the cage by a piece of stout canvas, D, about 18 inches wide. This bar should be made short enough to swing freely to and fro clear of the sides of the opening. Should any person be carelessly leaning over the shutter at an intermediate opening, looking down the well-hole at a time when the cage is above him and descending, the bar would strike him on the head or shoulders, causing him to involuntarily draw back before the cage could reach and crush him.

"At each of the intermediate openings a shutter is hung with cords and weights in a frame provided with pocket pieces for re-hanging when required. The weights should be slightly lighter than the shutter, so as to allow the shutter to drop slowly to the floor when liberated from the cage. The shutter does not slide in grooves in the ordinary way, as the grooves are not straight, but two small wheels are attached to each edge of the shutter, marked E in the detailed drawing; these run easily past the angles in the groove. The grooves run perpendicularly from the floor to about a foot above the top of the hoist opening, they then for a few inches bend towards the front of the opening, and again run perpendicularly as far as required. A pair of shutter lifters are attached to the top of the cage. The catch or part which lifts the shutter, marked F on the detailed sketch, is hinged to allow it to rise and slide past the shutter as the cage descends; it has behind it a stop, G, which prevents its rising to an angle of 90°, and thus causes it, when it has passed below the shutter, to fall of its own weight into the position in which it is again ready for lifting. Notches are cut in the floor to allow the projecting parts of these catches to pass and get underneath the shutter. As the cage rises, when its top reaches the floor level it begins to lift the shutter, and if the ascent of the cage is stopped when its floor reaches the level of the floor of the room or staircase landing, it holds the shutter above it. If the cage be next lowered, as it descends it drops the shutter into its former position, thus automatically fencing the opening, or if the cage continues to ascend it raises the shutter until as its lower wheels pass the bend in the grooves it slides off the catches,

become liberated, and descends slowly to the floor. As the cage descends it does not raise the shutters on the intermediate floors; but when it stops at any floor the shutter is easily raised by hand, as its weight should only exceed by a few ounces that of the counterbalancing weights. The catches hold the shutter up whilst the cage is at the floor level, and automatically lower it when the cage ascends or descends. Strips of hoop-iron should be attached to the back of the shutter where the catches slide past it as the cage descends.

"The arrangement for the top floor is exceedingly simple. A sliding shutter without cords or weights is lifted by the cage as it ascends, and dropped again as it descends. Where there is not headroom enough in the top story for a shutter to ascend, a bar placed across the opening can be raised and lowered by the catches lifting the shutters on the intermediate floors."

John D. Prior.

Mr. Prior also draws attention to a frequent cause of injuries, viz., the accidental starting of machinery, as follows:—

"A fatal accident recently occurred at one of the woollen mills in my district. A girl, fifteen years of age, was left alone in a room, engaged in cleaning one of a pair of spinning mules not then in use. The mule carriage had been drawn out to allow the girl to go between the carriage and the roller beam for cleaning purposes. Two levers, both requiring alteration in order to start the mule, were so set by the spinner before leaving the room that they both had to be moved to put the machinery into motion. When he returned, after a short absence, he found that the mule carriage had run in, and that the girl was lying quite dead with her head between the carriage and the roller beam. She had probably, when cleaning the headstock, moved the vertical lever in cleaning it, and had omitted to replace it as she found it; and when she had gone between the carriage and the roller beam, in cleaning the horizontal starting rod she had accidentally moved it, causing the carriage to run in, knock her down, and crush her before she was able to realise what had happened.

"At the inquest, I suggested that such accidents might be prevented by securing the horizontal starting rod with a pin or wedge, and the jury in their verdict endorsed the suggestion.

"I have recently received from Mr. J. A. Fletcher, President of the Huddersfield Trades Council, a working engineer thoroughly experienced in mule fitting, a suggestion which I think deserves to be made widely known, and carefully considered by every mule spinner.

"It is that when a mule is stopped for cleaning purposes, and anyone is required to go between the fixed and traversing parts, the carriage should not be run out to the full extent of its journey, but should be stopped about midway on its *outward* course. Then, if by any means the machine becomes accidentally started, the carriage would resume the motion which has been interrupted, running out to its full stretch, and stopping there a second or two to complete the twist of the yarn before running in again; thus warning the cleaner, and giving him or her time to get out of the way before it runs in."

As accidents are constantly happening in this manner, Mr. Prior's suggestion, that it should be made a practice to stop mules half way, is well worthy of the attention of those interested in preventing these lamentable occurrences—and I may also refer them to a patent automatic arrangement for preventing accidental

re-starting of machinery described in H.M. Inspector Pearson's report.

Mr. Hine, H.M. Inspector of Factories for the Leeds district, remarks:—

"With regard to accidents and dangerous machinery, there have been reported to me 384 accidents during the year ending October 31, 1893, as against 552 last year, of which 25 have been fatal against 20 last. Notwithstanding an increase of five fatal ones, I am glad to say the majority have been unpreventable. Only eight have been caused by machinery in motion, and of these only three might have been prevented by fencing the parts causing the accidents, and they were of a very exceptional nature. The 17, which I term unpreventable, include seven deaths from falling into quarries or stone falling on the injured; three by falls of slag in steel works; two by the fall of heavy weights in iron works; one from a fall from a ladder; another from a fall whilst walking on the gantry of an overhead crane instead of taking the proper way of reaching it; one from the breaking of a rope whilst hoisting some new machinery into a mill; and one from blood poisoning caused by the prick of a nail in a nail factory.

"Of the less serious accidents, which amount to 168 below the number of last year, I have had considerably fewer to investigate than usual as to whether the machinery was properly fenced. This is very gratifying, as it shows that manufacturers have been gradually protecting the dangerous parts of their machinery.

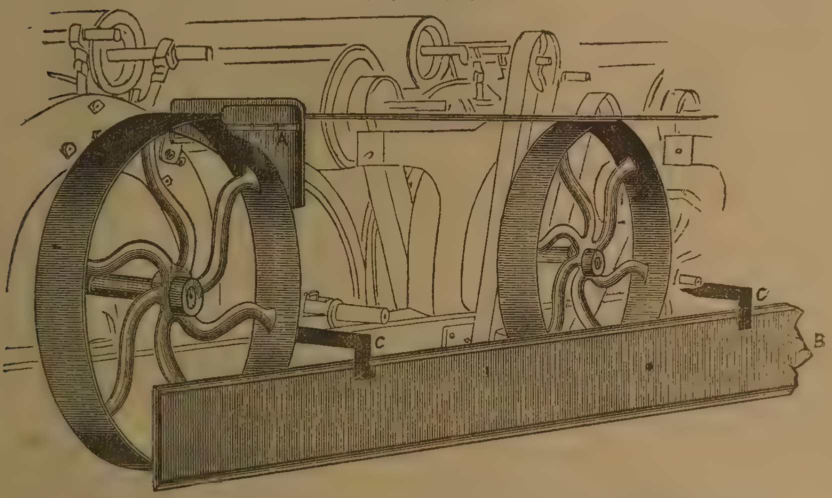
"In respect to fencing I may mention two matters which may be of general interest, and which have received my special attention. Firstly, the adoption of a fence for the side straps and pulleys of all woollen carding machinery, places where some very serious, and in a few instances, fatal accidents have occurred. My late colleague, Mr. Rickards, under whom I acted for five years or more as junior, and from whom I learnt a very valuable lesson in the way of fencing machinery, shortly before his retirement initiated this mode of protection, and I found, on taking charge of the district in 1890, that perhaps one third of the machinery had been so fenced. Since then I have persuaded other manufacturers to protect their machines in a similar way, until now I know of no mill in the whole of my district where these belts and pulleys are not guarded. I may say that I have been materially assisted during the last year or two by the inclusion of the words "dangerous machinery" in section 5. (A diagram of this mode of fencing will be found on the following page.)

"The other case referred to is the fencing of the horizontal shaft under the tables on which sewing machines stand in clothing and boot factories. The great danger in this shaft is when girls stoop down to pick something up from under the tables, and their hair, so often worn loose down their backs, comes in contact with the shaft, immediately wrapping round it, the result being their hair and scalp is torn off their heads in a fearful manner. By the aid of a few prosecutions where accidents have so occurred, and by the infliction of one or two heavy penalties, I have been enabled, as far as I know, to get all this shafting fenced in clothing and boot factories, which are very numerous in my district. The mode I most favour is that of small round iron rods stretched from end to end of the tables in front of, and at a sufficient distance from the shaft, the rods being placed at such distances apart that a girl cannot put her head between them. I prefer this to that of the shaft being protected with a solid wooden partition closing in the

space from floor to table, as is sometimes done, because when a belt requires putting on a pulley the boards have to be removed, and then unless the shafting is stopped, the same danger presents itself, that is, if the girl puts her own belt on, which is not an uncommon practice. Whereas with the plan just mentioned the arm can be put between the rods to adjust the belt without the head being able to get near the shaft, again the floor can be swept under the tables without removing the fencing, in fact the rods are always a fixture, this being in itself a matter of great importance, because when a guard has to be taken down for repairs or adjustments, as in the case of a solid wooden fence, there is the risk of an accident occurring whilst it is down, and also a danger that it is not put up again immediately.

"I should like to add that I have been very ably assisted by my juniors in getting both the shafting under the sewing machines and also the carding machine pulleys fenced."

Mode of fencing side straps and pulleys of carding machinery in woollen mills.



A. an iron guard affixed to the frame of the machine with a bracket. A similar fence is also used for the low side of the pulley; but I prefer a board B. running the whole length of the belt, and which is about 10 inches wide. It may be affixed to the machine by brackets C. or from uprights from the floor.

Mr. Robinson, H.M. Inspector of Factories, Dundee, reports:—

"I am glad to report a very considerable decrease in the number of accidents reported to me during the past twelve months as compared with the previous twelve months, though this is due principally to the depression in the jute and flax trade, and the consequent stoppage of machinery. The figures are, for the 12 months ending October 31st 1893, 10 fatal accidents, 322 non-fatal. For the previous 12 months, 11 fatal accidents, 411 non-fatal."

Mr. Lewis, H.M. Inspector of Factories for South Wales, remarks:—

"During the year, 301 accidents were reported to me, whereby 318 persons sustained injuries, being 44 more than in the previous year.

Of these 44 resulted fatally, the number being precisely the same as the fatalities of last year.

"The fatal accidents were as follows:—

Nature of Accident.	Number of Deaths.
Run over by locomotives and trucks	17
Falls in steel, iron, copper and fuel works	9
Falls in timber yard and ship repairing works	3
Falls in stone quarries and brick works	2
Burns and scalds	2
Suffocated by gas	2
Blows from tools	2
Crushed at fuel press	1
Caught by belts	3
Caught by cogwheels	2
Cut on hand by a tinplate followed by blood poisoning	1
Total	44

"I attended coroners' inquests touching 15 of the aforesaid accidents, only five of which were caused by machinery, three being due to the practice of adjusting belts on revolving pulleys, and two, to falls into cog-wheels. In one of the latter cases the fencing was defective and the occupiers were summoned and a conviction obtained under section 5.

"The firm, acknowledging their liability under section 82, agreed to pay the widow of the deceased the sum of 200*l.* as pecuniary compensation.

"In the blood poisoning case it transpired at the coroner's inquest that although the cut on the injured man's hand was but very trivial, a small portion of the chemical flux used in the process of tinning the plates, and composed of muriatic acid and sulphate of zinc, had entered the cut and thus started the mischief which terminated fatally in a month's time after the occurrence.

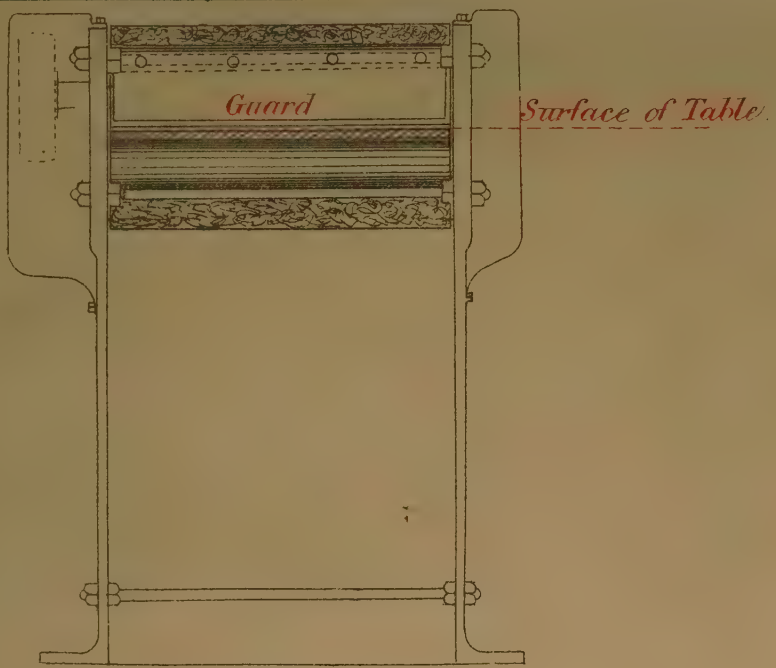
"During the year, one prosecution only has been taken by me under section 82 of the Act, and by order of the Secretary of State the amount of the fine imposed was applied for the benefit of the injured person, a lad fourteen years of age.

"I referred in my report of last year to the numerous accidents caused by the rollers of patent dusting machines which had been recently introduced at numerous tinplate works in my district. This year, I am glad to be able to report, notwithstanding the increased number of these machines in use, that the accidents have dwindled down to about one half of the number recorded last year. This happy result is doubtless due to the readiness with which the makers of new machines and the owners of those previously at work have adopted the suggested safeguards.

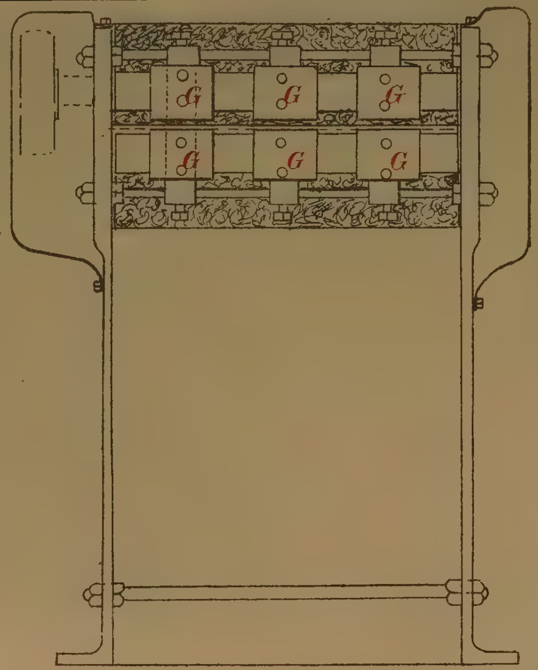
"The accompanying diagrams and descriptive notes are by my colleague, H.M. Inspector, Mr. Hilditch, and they serve to illustrate the three kinds of guards at present in use, each of which, whilst permitting a free passage for the plate into the machine, protects the fingers of the operative from the ingathering action of the feed rollers."

Mr. Arnold, H.M. Inspector of Factories for the Worcester district, observes:—

"To speak more particularly of this district, I am very glad to be able to say that what strikes me most, after having been for many years



ELEVATION Nº 2.



ELEVATION Nº 1.

Front Elevation of Nºs 1 & 2 machines shewing guards in position. The guards G. G. &c. Nº 1 may be fastened by "set screws" on to "tie rods" of machine. The guard on Nº 2. is fixed to a piece of angle iron, which is fastened to top "tie-rod" of machine. The guard itself is simply a piece of stiff sheet iron rivetted on to angle iron.

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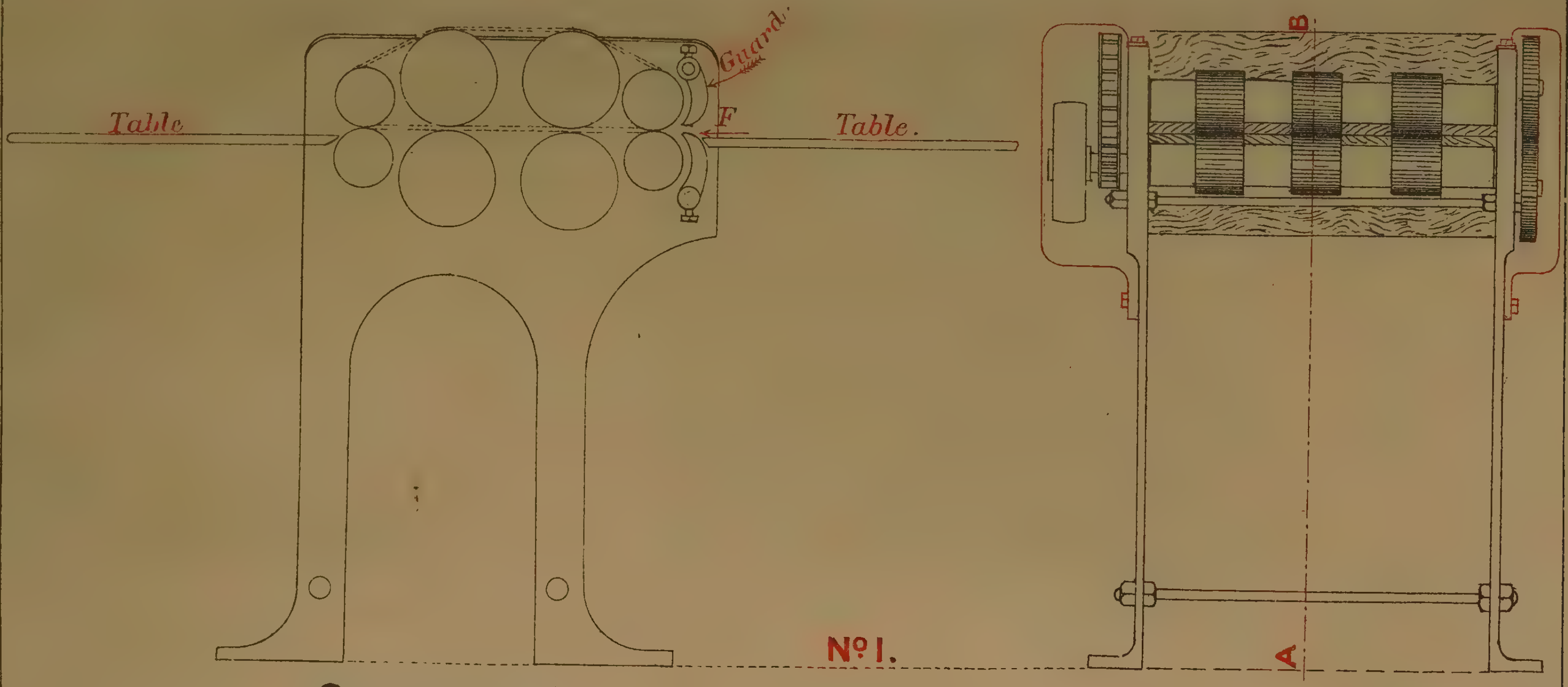

Nº 1.

SECTION A.B.

Another form of guard, which has a little advantage that it is slightly adjustable and can be fixed on the ordinary "tie-rods". It will readily be seen the object of these guards is to make the aperture F. so small, or to place it at such a distance away as shewn in Fig 2. that it would be practically impossible for the operator to get his fingers further than the mouth F.

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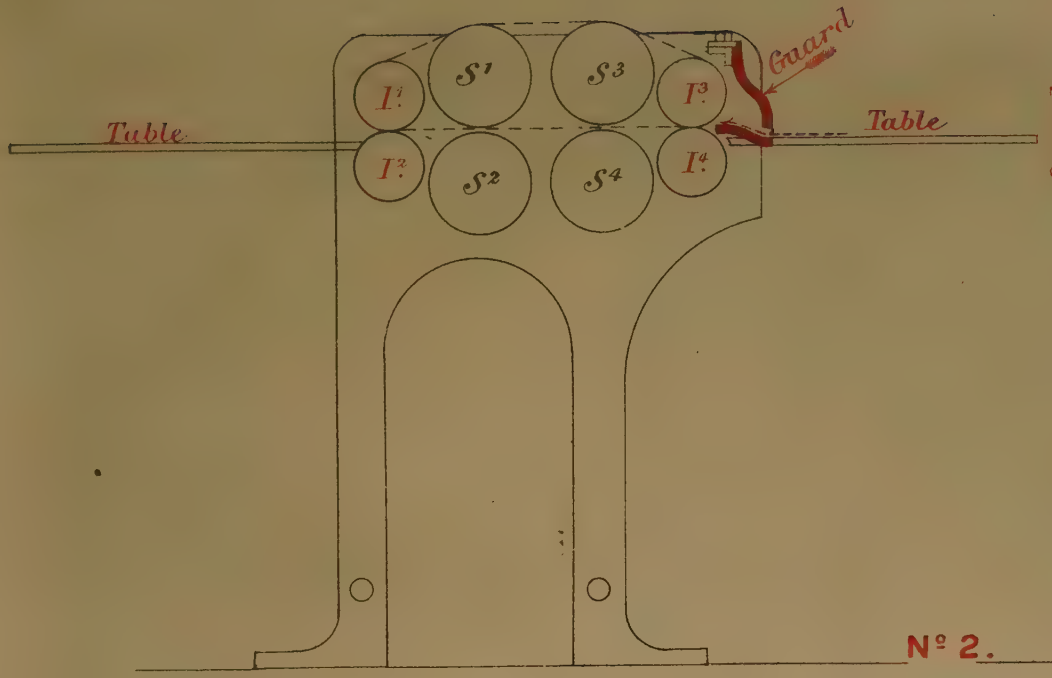
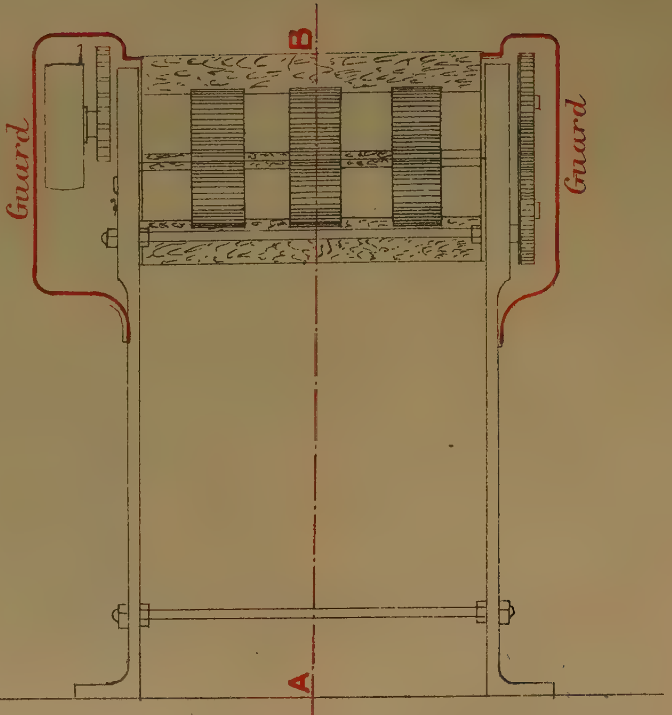


SECTION THROUGH A.B.



FRONT ELEVATION.

No 2.

Front & Side Elevations of Dusting Machines as used for cleaning Tinplate, shewing side guards for gearing, and guard for preventing the operators fingers from being caught in the India rubber rolls I^1 I^2 I^3 I^4 Rolls S^1, S^2, S^3, S^4, are covered with Sheepskin which brushes, or dusts the plate as it passes through. The Sheepskin rollers have a much higher velocity than the India-rubber rolls, therefore, when the plate is caught in the Sheepskin, the Rubber rolls having a retarding motion hold the plate back, thus giving a brushing action off the Sheepskin to the plate.

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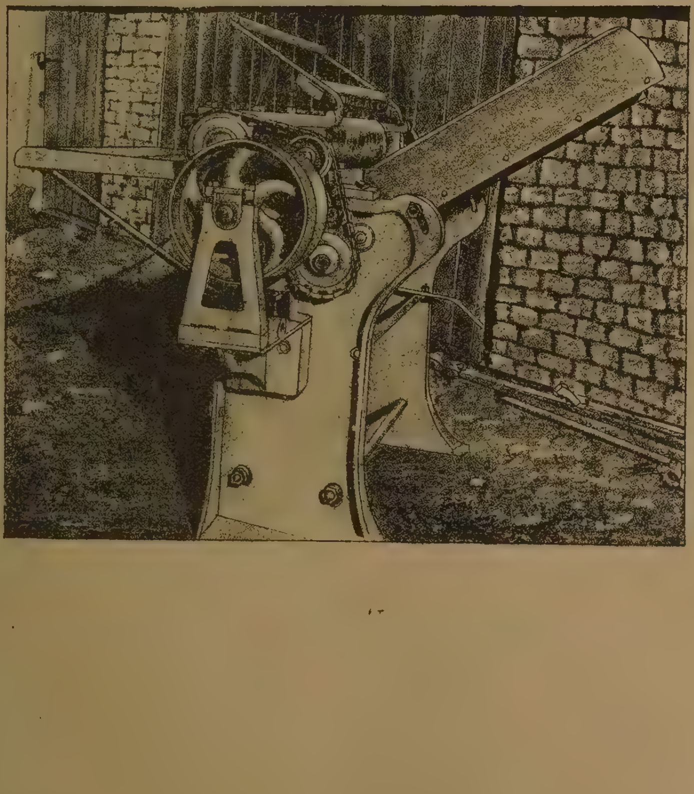

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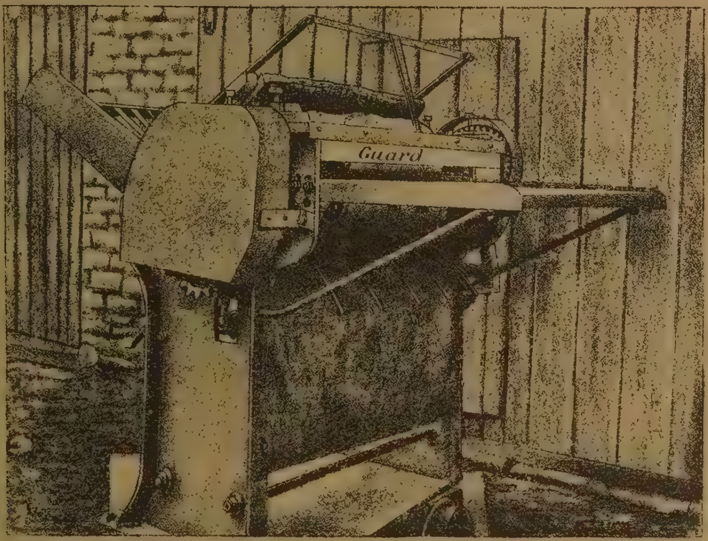

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in Lancashire, is the comparatively small number of accidents that occur, and the majority of these is, as might be expected, provided by the Stroud and Kidderminster districts.

"There have been two fatal accidents, one in the Forest of Dean, the other at Gloucester, the former I received notice of from the coroner, but not of the latter.

"Curiously enough they both took place in workshops in which men only were employed, and in each case death was caused by scalds received from the man having fallen into an open tank of boiling liquor, naptha in the one case, beer in the other. Besides these two cases a man was crushed between two wagons at Hereford, and a boy died in Worcester from anthrax contracted in a horsehair factory.

"With regard to the fatal accident at the brewery, I would like to point out that there are large numbers of these little workshops attached to small inns all over the Kingdom in which the mash tun, and less frequently the copper, will often be found to be in a very dangerous condition, only being raised a few inches above the ground.

"In the cases I have come across I have directed a rail to be put round, and I strongly suspect there are many others that are not known of."

Mr. Pearson, H.M. Inspector of Factories for the Rochdale district, reports:—

"My attention was drawn a few days ago to a contrivance for preventing the accidental starting of mules, &c., and after examining it at work, I have no hesitation in recommending it to your notice as a very valuable invention.

"During the present year there have been several serious accidents (one fatal) caused by the stop rod motion on mules being accidentally started and persons caught between carriage and back of frame.

"On Saturday last I investigated a case in which a man had his thigh broken and otherwise seriously injured which would have been prevented by this arrangement.

"I herewith forward you specification, &c."

The Specification.

Starting Handles of Mules and Twiners.

This invention consists in an arrangement to prevent the stop rod motion of mules and twiners being accidently started, thereby preventing accidents to the workpeople employed thereat during working hours, and avoiding accidents that might be caused by the belts creeping from the loose pulleys on to the fast pulleys and making it impossible for the mule to to restart without the automatic stop motion being drawn out of gear by the minder in charge of the mule.

Patent No. 19,048 (Wrigley, Howard and Holt).

Complete Specification.

An Automatic Arrangement for Preventing the Accidental Starting of Self Acting Mules and other Machines.

William Holt mule overlooker, Abel Howard engineer, Benjamin Wrigley, mill manager, all of Luzley Brook, Royton, in the County of

Lancaster do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention is an arrangement to prevent the stop rod motion of self acting mules and other machines being accidentally started, thereby preventing accidents to the workpeople employed thereat during working hours, and avoiding accidents that might be caused by the belts creeping from loose pulleys on to fast pulleys and making it impossible for the mules to restart without the automatic stop motion being drawn out of gear by the minder in charge of the mules.

Figs. 1 and 2 shew the arrangement out of gear as when the mules are in motion.

Figs. 3 and 4 shew the arrangement with the starting rod *a* locked and the mules stopped, thereby preventing the starting rod *a* moving until the locking pin *b* is drawn out of gear.

When the mules are started the rod *a* is pushed up in the ordinary way and the locking pin is kept in contact with it by means of a spring *c* Figs. 1 and 2.

To stop the mules the rod *a* is drawn back as in Figs. 3 and 4 and as the rod *a* drops on the fixed bracket *d* by means of the notch *e* the pin *b* immediately locks the starting rod *a* to the fixed bracket *d*, thereby preventing the rod *a* being started by being accidently knocked by the workpeople or by the friction of the belts against the guiders, the spring and locking rod arrangement may be placed either horizontally as shewn or otherwise.

To scotch the locking rod *b* whilst whipping the cops, that is, to enable the workman to keep starting and stopping the mules at various positions of the stretch he puts the automatic rod *b* out of gear by pushing the slide stop arrangement in position shewn at *f* Figs. 1 and 2, the handle or starting rod *a* is then pushed up until the projection G pushes the slide *f* out, the mule is then in motion. To stop the mule entirely the rod *a* is drawn out its full length until the locking rod *b* pierces the rod *a* as shewn in Figs. 3 and 4.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed we declare that what we claim is.

An automatic arrangement for locking the starting rod and for preventing the accidental starting of the mules as hereinbefore set forth and more particularly described in drawings and specification.

Mr. Tinker, H.M. Inspector for the Bolton District, remarks:—

"The large number of notices of accidents which have been sent me causes me considerable anxiety, and although the number reported is 583, or 44 less than last year, I am far from being satisfied, and hope to have a much larger reduction before the end of next year. I stated in my last report that during the year 160 accidents had happened to little piecers and others by being caught by scroll bands and carriage wheels of self-acting mules. I also stated that owing to the ready manner in which employers had put on new guards, I was already finding accidents of this nature becoming less. I am now pleased to report that instead of 160 as last year the number this year has been reduced to 59, and when the self-acting mules throughout the district are fitted with guards, I believe accidents of this kind will be almost nil. Below I give a few diagrams showing the kind of guards I have recommended. No. 1 shows the carriage wheels working on the carriage slip, the one marked A is guarded, and the one marked B is not guarded. It will be seen that the

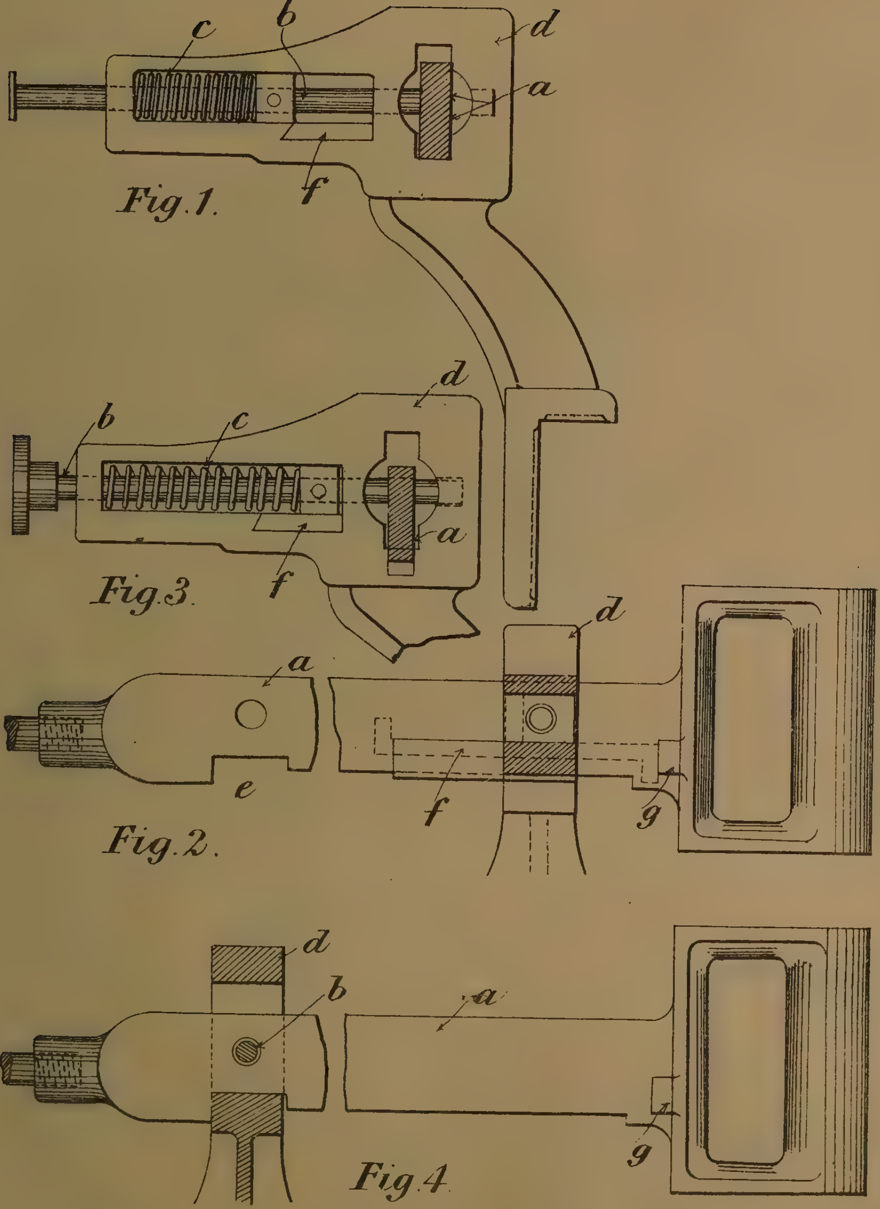
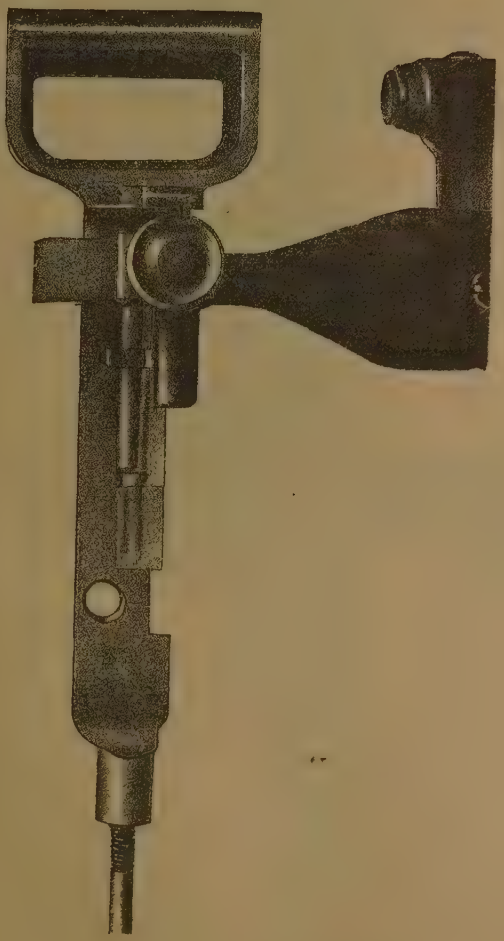


Fig. 1.

Fig. 3.

Fig. 2.

Fig. 4.



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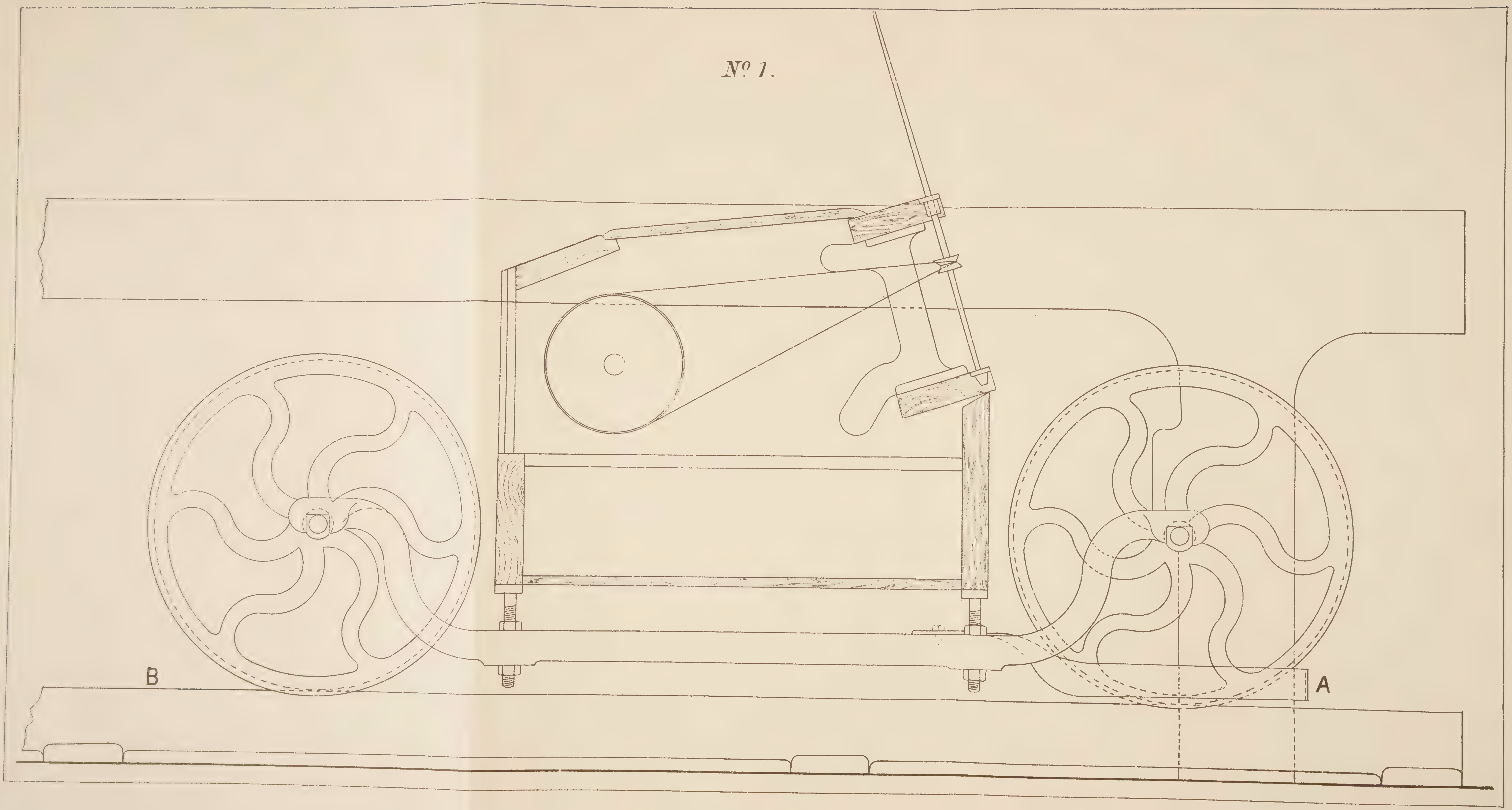
No. 1.



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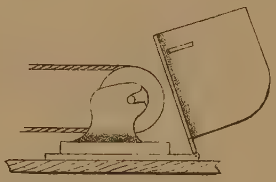
No. 2.

UPRIGHT PULLEY & FRAME.

FLAT PULLEY & FRAME.

No. 3.



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No. 4

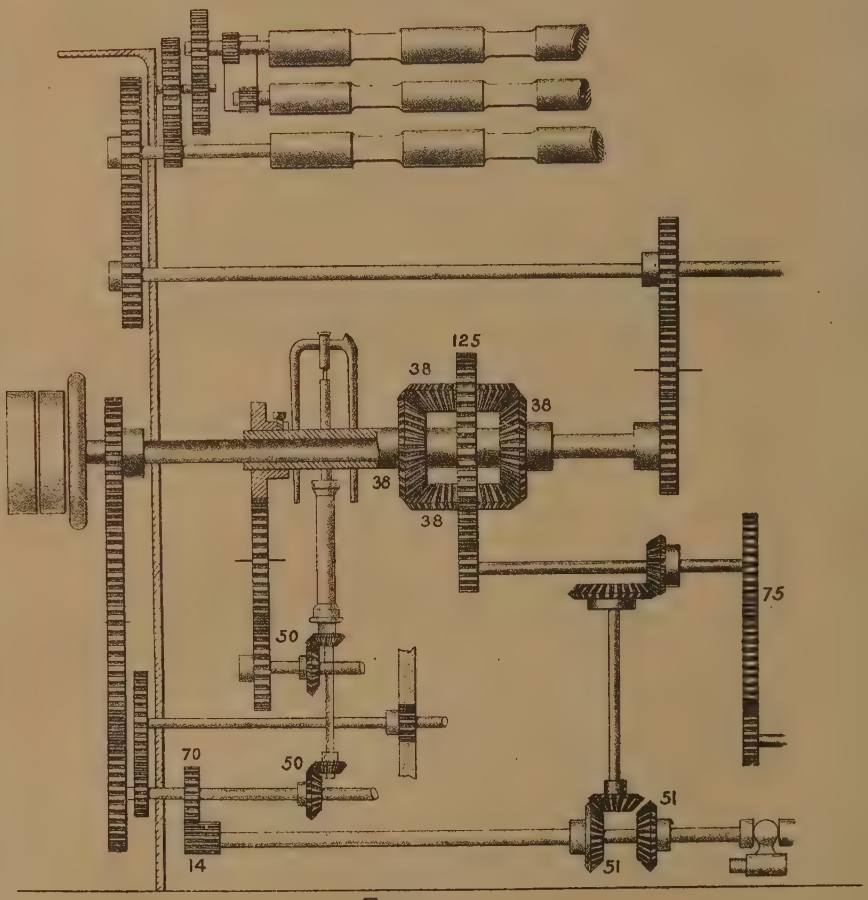

FIG. 2.

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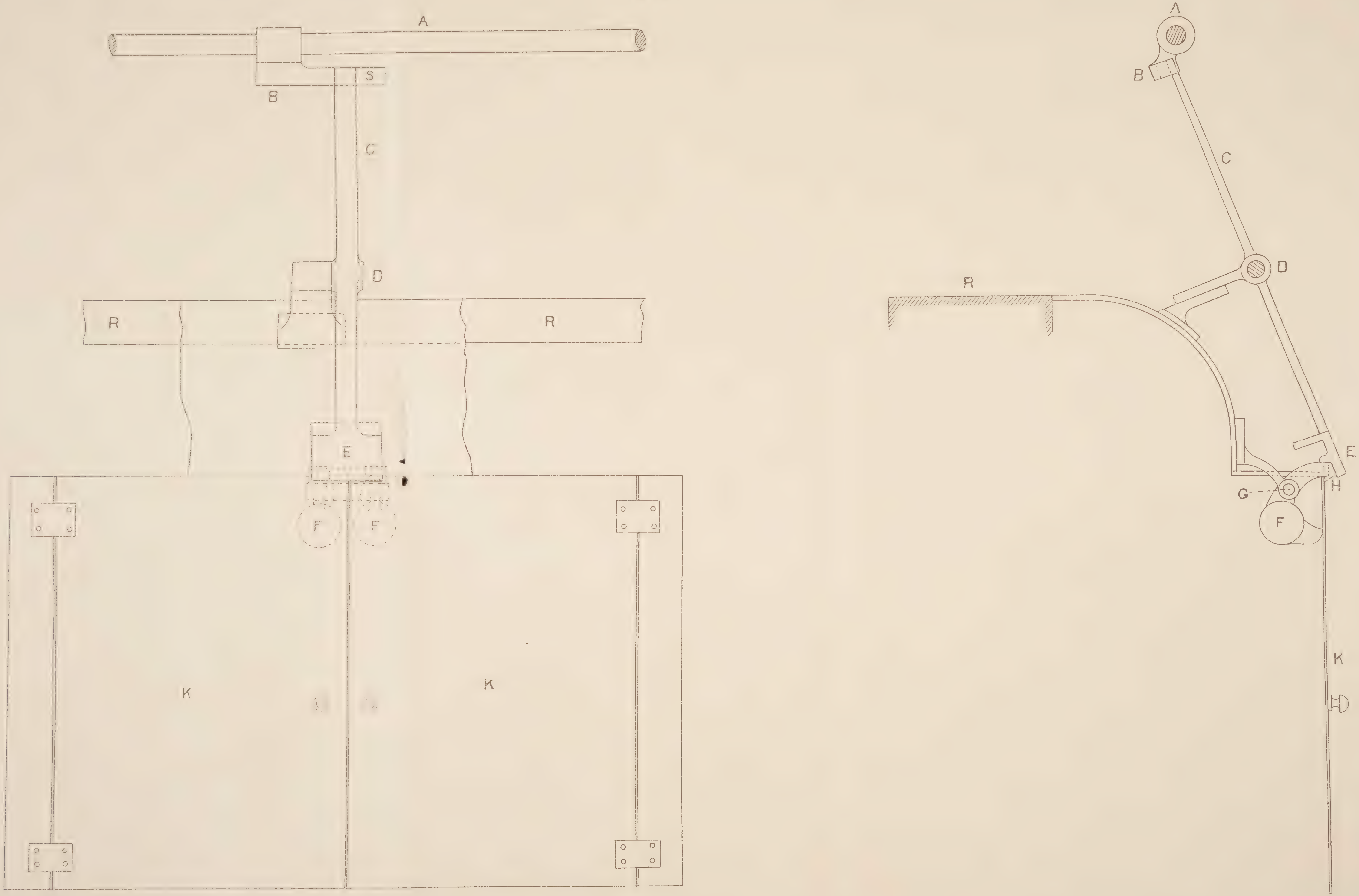
Nº 5.



guard is simply a short length of sheet iron bent so as to work just over the slip and fastened at the back with a small set screw. The one marked No. 2 also shows the carriage wheel with and without a guard the flat pulley is covered to prevent accidents. This I consider a very good and effective fence. Another good guard for scroll bands on old mules is a tin cover made with hinges which can be opened when the wheel and band should be cleaned or changed, as per diagram marked No. 3. (*See* diagrams).

"Another source of numerous accidents are the Jack Fly or Speeder machines. The girls who work these machines often clean the *side wheels* while the machine is in motion, and the waste getting entangled in the wheels the fingers many times get drawn between the cogwheels. The diagram No. 4, shows the wheels alluded to, and the diagram No. 5, shows the end of the frame with closed doors which completely covers the side wheels and cannot be opened till the strap is on the loose pulley and the machine stopped, nor can the machine be set going till the driving strap is on the fast pulley, and this cannot be done till the doors are closed. I am told by the manager at Messrs. Dobson and Barlow, Limited, where machines of this kind are made, that no machine is sent abroad without the protecting doors, and that none of the English manufacturers ever ask to have them put on. I feel certain that accidents would be greatly reduced if this class of machine had on all occasions these doors or something similar."

Mr. Sedgwick, H.M. Inspector of Factories for the Walsall district, remarks:—

"I find the occupiers, as a rule, willing to affix guards or protectors when the necessity is pointed out to them, but the guards are frequently removed, and the dangerous parts of the engine or machinery exposed.

"It is with regret that I have to comment upon the very large number of accidents that have taken place during the year commencing November 1st, 1892. In some of the cases a slight alteration of the fencing and guards in use may have prevented the accident, but in far too many cases heedlessness and want of proper attention on the part of the workers have led to the injuries received. There seems to be an almost total disregard for either the personal safety of the individual directly concerned or the safety of others who may, for the time, be brought into proximity to them. One man requiring some grease, which could have been obtained for the asking, chose rather to try and get some from the cogged wheels of a pan mill (whilst in motion), four of his fingers were thus taken off. A girl working a punching machine was cautioned for inattention, shortly afterwards she lost the top part of her forefinger by the descending punch. A fellow worker on the next machine, immediately after the accident was also cautioned. She told the foreman it was nothing to do with him, as he would not feel it if she met with a similar accident. I was visiting an iron mill on September 15th, 1893, having passed the man at the furnace who stood and looked at me whilst passing, I turned to go and examine the rolls. Whilst going towards them this man flung a billet of hot iron, weighing about 18 lbs. (and just taken from the furnace) towards the rolls. It struck me on the calf of the right leg, knocked me down and falling upon the hot iron my clothing was destroyed, and my leg severely burnt. I was under the care of the doctor for upwards of three weeks, unfit for duty. When the man was asked why he threw the iron whilst I was going to the rolls, he said 'I did not see you.' He afterwards said 'I saw him pass me and thought he had crossed to look at the engine.' Had the

man been at the furnace, I should have spoken to him and requested him not to throw any iron until I had come from the rolls, but as he saw me at a distance of about one yard and he was about six feet from the furnace I did not think this necessary. When I fell there would be six or eight people within 12 feet of me, yet none offered any assistance or enquired as to my injuries, but went on with their work as though such matters were every day occurrences. I think this case indicates the habitual carelessness and callousness prevalent in some parts of this district, and to some extent explains the reason why accidents are so numerous."

WALSALL DISTRICT, Year ending October 31st, 1893.

TABLE OF ACCIDENTS, FATAL AND OTHERWISE.

How caused, Machinery, &c.	Number.	Sex of injured Persons.	
Drills and cutters	30		
Planing machines	3	Males	213
Pullies, belts, and shafts	—		
Power presses	24	Females	26
Circular and band saws	10		
Cogged wheels	21	Total	239
Burns and scalds	59		
Cranes, &c.	5		
Steam hammers	6		
Iron rolls	1		
Grindstones	7	Fatal Accidents.	
Lathes	15		
Miscellaneous	58	Males	13
		Females	—
Total	239		
Fatal accidents	13	Total	13
Total injured and fatal accidents	252		

Number of accidents investigated	96
" fatal accidents investigated	10
Total	106

Mr. Shaw, H.M. Inspector of Factories for the Manchester district, reports:—

"My district being a very large engineering centre a large number of notices of accidents caused by machinery have been reported to me during the past year, I find upon investigation that a large number of these, especially injuries to fingers and limbs might not have occurred had proper supervision been paid to the fencing of ingathering cogs of machines which appeared apparently harmless until an accident or fatal calamity has occurred. It is then and not till then that many, and I may say very many, occupiers and managers, also employés themselves realise the necessity for proper supervision and protection by fencing dangerous machinery.

"Thanks to the powers given us by the Act of 1891 as to safety, I am pleased to be able (and it is very gratifying to me) to report that only in very few instances do occupiers or managers make slight or any objection to any suggestion I may make as to the fencing of any machinery where I consider fencing is required, and I have felt it my duty in investigating accidents to point out to the employés as well as the occupiers and managers, the necessity of so doing as far as practicable, explaining also what knowledge has been acquired from experience in investigating accidents and the knowledge gained thereby.

"In all cases where the law is not complied with prosecution has followed, and I find from experience it has had a good effect in the neighbourhood."

Mr. David Walmsley, H.M. Inspector of Factories for the Stockport district, remarks :—

"I find that gas engines are becoming more popular every day, numbers of employers are discarding the old steam engine and adopting the former. A certain engineer in Stockport gave me a very forcible reason why he had a gas engine fixed, and let his steam engine lie idle. He stated 'before I adopted the gas engine it cost me about '20*s.* per week for coal and, say, about 15*s.*, part of a man's wage for 'attending to boiler and engine; now I run the gas engine the same 'time, it produces the same motive power, and the total cost is only 'about 18*s.* per week, and it practically requires no attention.' These small engines are invariably fixed by the builders and left unfenced, consequently when the machinist leaves the engine, in his opinion complete, H.M. Inspector visits the factory and finds the fly-wheel and crank ungarded. In my opinion it would be preferable for the makers to adopt a suitable guard for each particular type of engine, and fix the same before the engine begins work, this could be done cheaper and more expeditiously than the present system.

"There has been a number of accidents in this district, mostly of a slight nature, very few have been caused by defective machines, a very large number being caused by cleaning machinery in motion, and mischievously playing with movable parts of machines. It is surprising how incautious numbers of young persons are in this respect, their aim appears how risky they can be without getting injured. From the number of accidents recorded (some very serious) where young persons have been injured through cleaning machinery in motion, it appears to me that some further restriction would be beneficial, in order to prevent an annual repetition of these sad and preventible accidents.

"Hoists and main gearing are better protected than formerly, and I find a general desire among employers to strictly carry out all necessary fencing. There is one point of danger which I occasionally find, more especially in small or old established works, viz., the projecting set screws attached to collars, principally on horizontal shafts ; this is a fruitful source of accidents, and in my opinion requires prompt removal ; a youth in Macclesfield during the present year was taken round the shaft through this defect, but fortunately escaped with only a broken arm. This defect will not be thoroughly removed until the slovenly engineers have been taught that such defective work cannot be allowed to remain.

"There does not appear to be sufficient safety for operatives when boilers are allowed to work without any definite standard of efficiency. Here is a case in point; a certain manufacturer drew my attention to an apparent danger of an explosion from a certain neighbouring boiler and

requested me to note his complaint. I examined the boiler, which was a small horizontal one and was used to drive a fan by the aid of a small engine, a few hours each day, when required. The boiler had an outside safety-valve loaded with scale weights, and said to blow off at 30 lbs. pressure per square inch. There was no water gauge, steam pressure gauge, or water feed attached to the boiler; the boiler was filled from the manhole, screwed down and steam raised; if the boiler should chance to have all its water used up, or the unsatisfactory safety-valve fail to act, or be tampered with, the result can easily be guessed, yet, in face of these glaring defects, the occupier considers his boiler safe and, in spite of my suggestions, declined to make any alterations."

"In consequence of a boy being nearly killed at a mill in Stockport, last week, by the descent of the mill hoist, crushing his head between the bottom of the hoist floor and the hoist door on the landing, I have been considering if some modification of the hoist could not be adopted to prevent the large number of fatal and other serious accidents, where the operatives get crushed in the descent of the hoist. It has occurred to me that a portion of the floor could be hinged to open upwards (say, six or eight inches along the front of the hoist), by this means, any obstruction would simply raise up the front portion of the hoist floor, and no injury would ensue. I am laying the idea before a firm of hoist builders in the north of England and trust some good may result, if life or limb can be saved.

"I enclose you rough sketch.

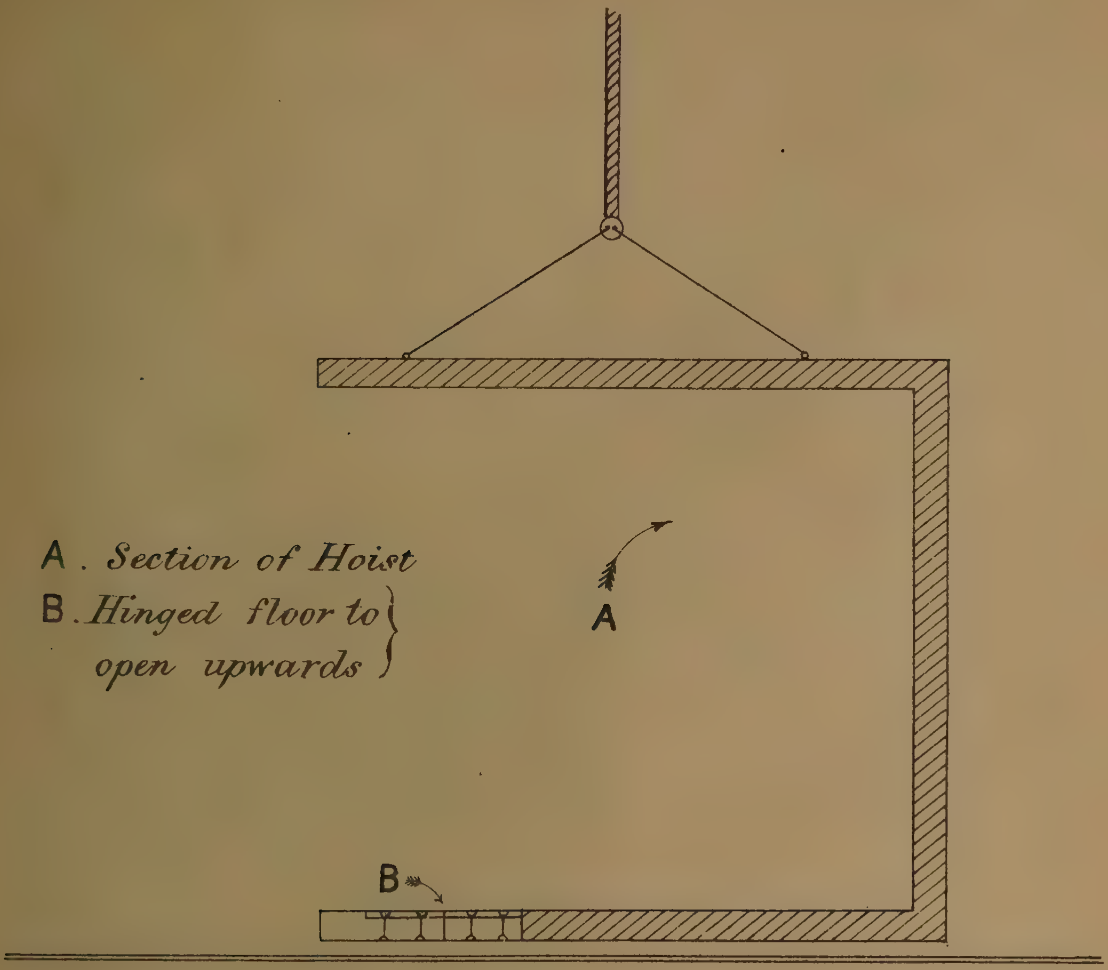
Mr. Ashworth, H.M. Inspector of Factories for the Ashton-under-Lyne district, observes:—

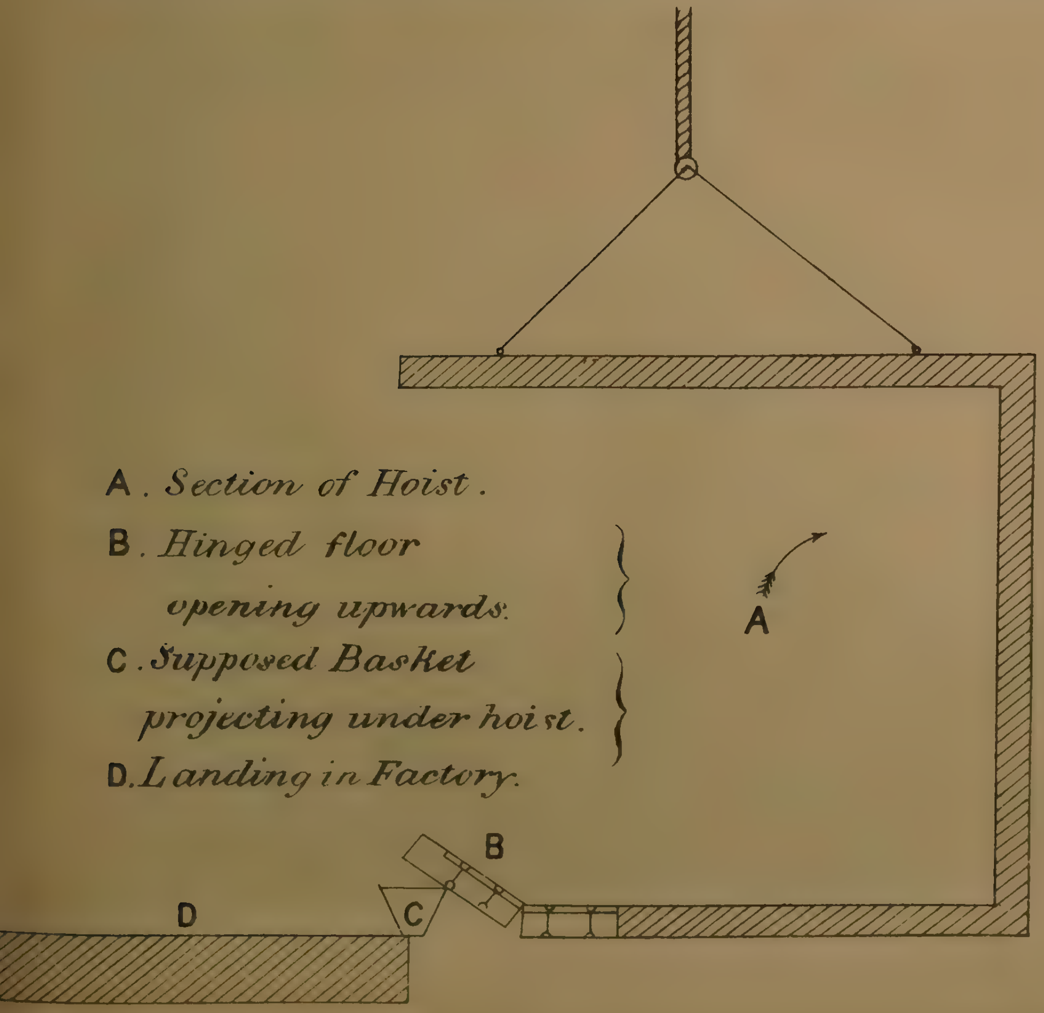
"I have had a large number of accidents reported to me, and I have therefore devoted a considerable amount of attention to the question of fencing, which I trust in the future may result in a much reduced number of accidents.

"My suggestions as to the fencing of dangerous parts of machines, have on the whole been well received. At times, there has necessarily been a difference of opinion as to what is *dangerous*, but in the end, without a solitary exception, I have succeeded in getting done what I wished, and this, too, without proceedings being taken in court.

"Few of these accidents have been very serious. There have been three fatal accidents, one caused by an overhead strap breaking and striking a lad on the head; another was caused by the lifting of a large log of wood. A man went underneath it, and at the same instant the 'dogs' holding the log, slipped, and the man was killed by the log falling on him; the third occurred at the Shepley Mills Linoleum Co., Limited, and was due to a fire and explosion caused by some hard substance getting into the breaker or opener for breaking up the cork used in the manufacture, which caused a spark and ignited the small particles of cork flying about in the atmosphere. This accident is the more remarkable from the fact that the air in the breaker room is now so much clearer from dust than formerly. When I first visited these works, the atmosphere was very dusty, but latterly, a 'Blackman propeller' has been put in, and the air has been comparatively free from dust since.

"The remaining accidents, 261 in number, have not been severe, and do not call for any special comment.





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"*Fatal accident at Shepley Mills Linoleum Company, Limited.*

"Since writing the account of the accident at the above works on pages 1 and 2 of this report, I have received a letter from the 'Blackman Ventilator Co., Limited,' who placed the fan in the room, in which they say that 'We have suggested that the exhaust fan be 'fixed directly behind the grinding mill in the bottom room, so that any 'sparks given off from the mill, would be at once drawn to the outside. 'We feel satisfied if this be done, there would not be the slightest 'danger, and the rooms would be kept free from dust. We should 'have suggested the above proposals in the first instance, had we been 'informed that the grinding mill emitted sparks.'

"Also, since writing the early portion of this report, there has been another fatal accident. This was caused by a fall of stone in a stone quarry at Austerlands, near Saddleworth, by which a man was killed."

Mr. Johnson, H.M. Inspector for the Newcastle-on-Tyne district, observes:—

"The most noticeable feature is the great number of accidents, of which in nine months there have been 337 reported, of which 27 proved fatal.

Nature of Accident.	Deaths.
Falls from scaffolds (ships) and other - - -	9
Killed by cranes - - - - - -	4
Fly-wheels of gas engines 2, steam 1 - - -	3
Cog-wheels - - - - - -	2
Run over on railway sidings - - - - -	5
Fall of earth - - - - - -	1
Fall of machinery - - - - - -	1
Caught by unfenced shaft - - - - -	1
Caught by belt in saw mill - - - -	1
Total - - - -	27

"Of the fatal accidents, the one caused by the fly-wheel of the steam engine was caused by the most extraordinary foolishness of the deceased person, a man of large experience with steam engines; he was in charge of an engine at a paper works; this engine worked in conjunction with a water wheel. In order to oil a portion of the gearing he had taken down the fence to the fly-wheel and had habitually crawled through the spokes of the wheel when stopped; on the last occasion whilst he was oiling the gearing, the buckets of the water-wheel had filled from the dripping in of the waste water and so caused the engine to be in equilibrium; as he crept back his additional weight caused the fly-wheel to make a partial revolution, and his neck was broken.

"As this is largely an engineering district accidents will always happen that cannot be prevented, such as burns, of which 46 are reported; scalds 10, and a miscellaneous number, 100, from a variety of causes.

"To these must be added 145 accidents from general machinery. It is most regretable that 45 of these arise from lathes, the major portion of which were quite preventible, caused either by the back gear or the change wheels.

"Reverting again to the fatal accidents caused by falls from scaffolds in ship yards, I have made, at times, the strongest representations to the occupiers on the folly of allowing men to work on unsafe scaffolding; it is a common practice for rivetters on ships to work on a scaffold of one plank; the occupiers in reply say that they are powerless, that they pay the men piece wages and allow them as much staging as they choose to use, but that it is too much trouble for the men to make a safe scaffold, and that if they attempted to coerce the men into making larger scaffolds it would cause friction and perhaps lead to a strike.

"It is very satisfactory to find, at times, firms willing to go to the expense of fencing lathes where many are in use after years of freedom, and I find that the largest firms are the best to deal with. I would mention the engineering department at North Road, Darlington, of the North Eastern Railway Company; I believe that every lathe is securely protected, and the guards that are applied are made attractive to the eye by being prettily painted. Another large firm, having in use about 150 lathes, will by this have every lathe securely fenced; immediately after my last visit to these works eight men were set to work and will be occupied three or four weeks in guarding these and other machines. It is the small factory occupiers, struggling to make a living, who protest most at what they consider unnecessary expense."

Mr. Parkes, H.M. Inspector of Factories, who assists Captain Smith in the Sheffield district, observes:—

"*Brick Presses.*

"The guard described below has been in use in Sheffield for a considerable time, and has been found practicable and, so far, has prevented persons getting their hands underneath the movable tools or moulds.

"The guard consists simply of a sheet of iron or steel, cut out to suit the various shaped machines. This is bolted on to the 'take off' front (where the brick is pushed forward), and entirely blocks up all spaces excepting the aperature for the brick to be pushed through. Any dirt accumulating at the side of the mould can be removed by a piece of bent hoop iron, if necessary. The following sketch shows the front of the machine where the bricks are taken off.

Grindstone Accidents.

"I venture to make the following brief remarks, only as a contribution towards the solution of this difficulty. The majority of stones break through—

a. Having natural faults, or cracks, in the interior;

b. Being composed of rotten material.

"As these defects are in the material when hewn out of the quarry, I suggest the following test:

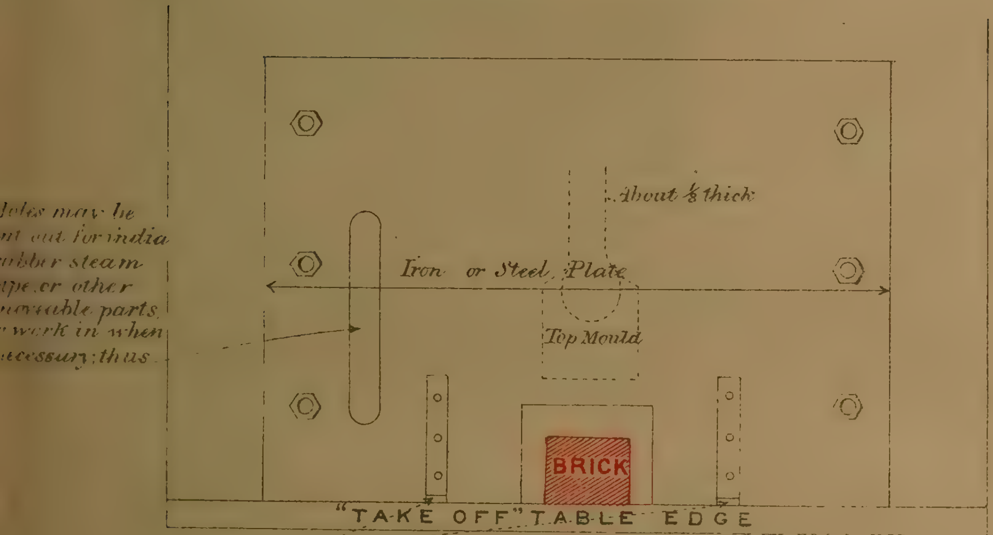
"That all grindstones above a certain weight shall be turned round on an axle at twice (at least) the ordinary working speed, at the quarry.

"I submit that so long as unsuitable material is used, through being cheaper in price, these accidents will happen."

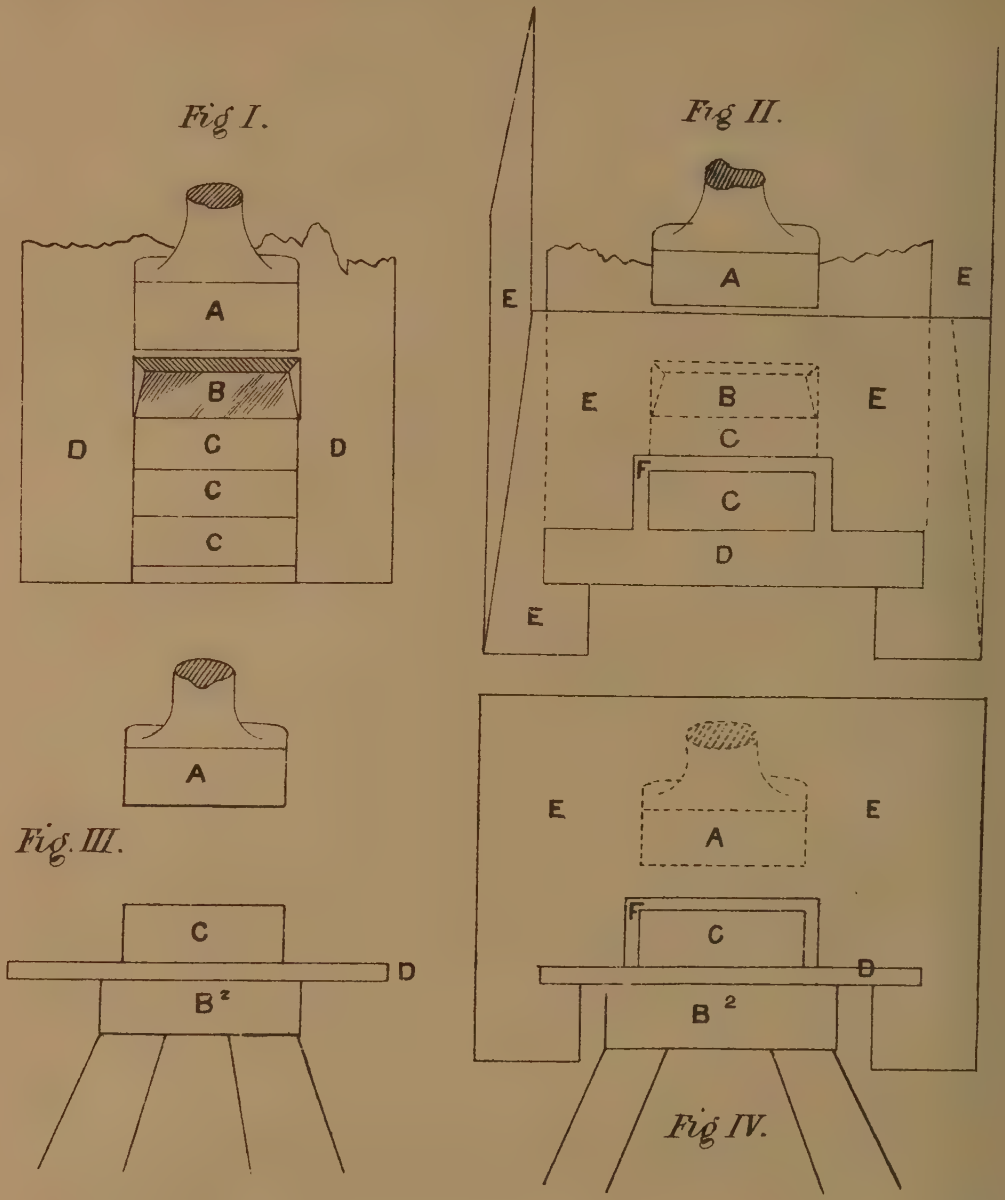
Mr Dodgson, H.M. Inspector of Factories, who assists Capt. Smith in the Sheffield district, remarks:—

"As regards the fencing of machinery and mill-gearing I have, so far, adopted the line of my colleagues and predecessors in Sheffield that every point of exposed danger shall be effectually and efficiently shielded. This I have striven to maintain with the more rigorous application

BRICK PRESS GUARD.



If bolts cannot be used, the guard may be fixed by a pair of Iron Knees as shewn



PLAN OF SHIELD FOR AUTOMATIC DELIVERY BRICK PRESS

Fig I *Elevated delivery table of Brick Press.*
" II *do* *do* *do* *do* *and Shield.*
" III. Face Elevation of *do* *do*
" IV. *do* *do* *do* *do*

A. *The Ram.*

B. *The Mould or Socket.*

C. *Bricks.*

D. *Table or Face of delivery Plate.*

E. *Shield with wings.*

F. *Aperture in the Shield through which C. Brick passes.*

B^2. *The mould with supports beneath the table.*

demanded by the enactment of 1891. The occupiers who seem least to regard their responsibility in this respect, are those who have converted workshops into factories by the application of gas motive power. Of these there has been a large increase within recent years in the Sheffield district; and defects are now being remedied after constant and persistent requests and recommendations. Other occupiers of factories generally appreciate their liability and, accepting the recommendations of an inspector, usually provide, with little delay, all necessary fencing when asked to do so.

"From the number of accidents I have had to investigate, or which have been brought to my notice within the last six or eight months—accidents which have resulted in the loss of fingers or hands from inattentive manipulation of brick-presses—I am led to regard most forms of machine presses for the making of bricks and sanitary pipes as a very dangerous class of machinery indeed. The youthful operative will persist in anticipating the automatic delivery of the new made brick, whilst older operatives sometimes have a strange disregard for the dangerous folly of placing the hand between the ram and socket, wherein the pressure is applied to the prepared clay. A moment's inattention in such a case and a hand is sacrificed.

"To obviate the dangerous character of the worst type of brick-press I have recently recommended the erection of a sufficient shield of sheet iron, perpendicular to the horizontal face of delivery plate or table, about 18 to 20 inches high and at a distance of some 6 to 10 inches in front of the ram and socket. To this shield I add wings or projections to each side of the table, leaving an open space between the wings and table for the waste clay to drop on the floor. The shield has a perforation or aperture directly in front of the ram, with sufficient chase, say, ½ inch to 1 inch each way, larger than the size of the brick, to permit the easy emission of the brick by automatic delivery through this aperture. By this means there always remains one brick at least between the operative's removing hand and the ram with its attendant danger. The delivery of bricks cannot be forestalled by the operative, whilst the narrow space of the aperture between the shield and the brick will be (at least so I hope) an effectual bar to placing a hand inadvertently beneath the ram. (*See* sketch annexed.)

"Unfortunately this contrivance is unavailable for this hand filled steam press for sanitary pipes, where the socket has to be lubricated within by hand before pressure is exerted by steam, a process involving great danger in case of premature set on motion.

"Whilst writing on dangerous machinery I am led to refer to the unaccountable flying or bursting of grindstones. Regarding these, hidden flaws, culpable overspeeding, accidental racing, inefficient mounting, and some other accountable causes are undoubted prolific sources of accident. But in my enquiries I have noticed the large proportion of flying grindstones, which occur immediately after the starting of the engine or within a few minutes of setting the grindstone in motion after rest. This is a singular coincidence, if coincidence it be; but if this result be the effect of a cause, it is found in the water-logging of the stone, the lower portion during rest, being immersed, has become saturated, whilst the upper portion has in the meanwhile become comparatively dry. Water-logging has, I know, been recognised as a fruitful source of accident, but if it should be found, on further enquiry, that most stones which fly do so within a few minutes after starting, some regulation ought to be passed whereby it would be obligatory for the grinder to tap his trough and empty it of water previous to any prolonged interval of rest.

"The notoriously unsatisfactory condition of the Sheffield grinding wheels has already been amply represented to, and recognised, by you. I fear little improvement can be effected without an extension of the provisions of the Factory Acts; and this, it is gratifying to observe, is receiving merited attention in the scheme of legislation which is at the present time being initiated and discussed."

Mr. Edwards, H.M. Inspector of Factories, who assists Mr. Lewis in the South Wales district, reports :—

"In the section of the South Wales District which I visit, the fencing of machinery, &c., is in a very satisfactory state, and almost invariably occupiers have expressed willingness and anxiety to carry out any suggestions that I have made with regard to fresh or new fencing for the better protection of life and limb, in fact I can only call to mind one solitary case in which an occupier expressed his unwillingness to carry out my suggestion, and he also affirmed that such fencing would not only be useless, but would rather tend to increase the danger. I reported the case, forwarding with it a rough sketch of the proposed fencing. It subsequently transpired that H.M. Inspector, Mr. Aug. Lewis had during his last visit (previous to mine) to the factory, ordered the identical parts to be fenced. The occupier was prosecuted and fined for neglecting to do so.

"In order to illustrate the anxiety of some of the firms in this district to comply with the Factory Act, I will mention that :—Messrs. Thos. Owen & Co., Limited, of the Ely Paper Mills, near Cardiff, are putting down two additional mills, and when they are working they will be the largest paper manufacturers in the kingdom. In the agreement with the contractors for the machinery there is a clause in which it is stipulated that all machinery shall be fenced in accordance with the requirement of the Factory Act, and to the satifaction of Her Majesty's Inspector of Factories.

"It is also satisfactory to notice that the more modern machines, &c., are better guarded in the first instance, and care to a certain degree is bestowed in order to prevent accidents. For instance, in the more modern drilling machines the heads are usually larger, thereby enabling the set screws to be counter sunk.

Shuttle-guards.

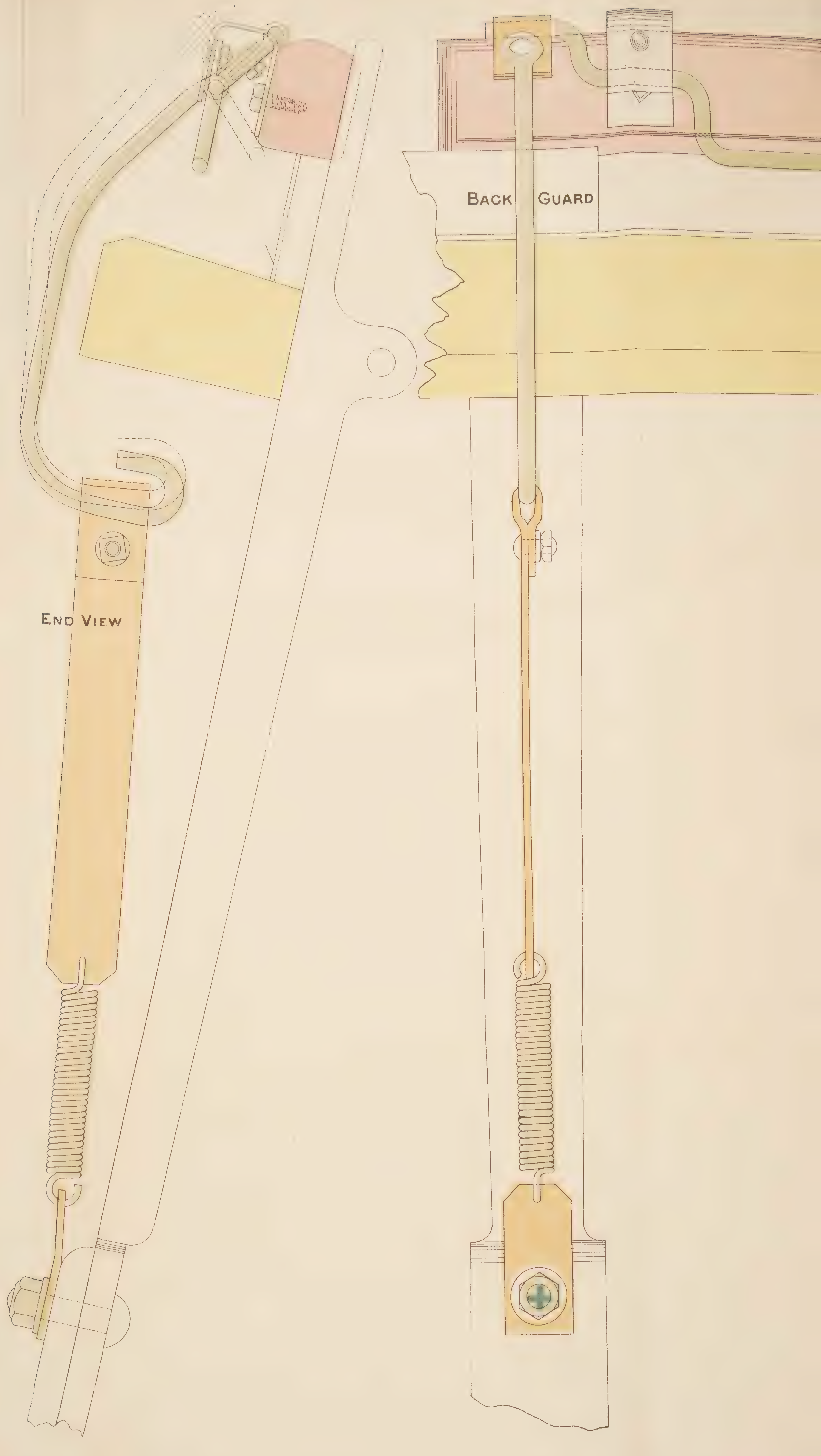
I have received the following reports as to shuttle guards :—

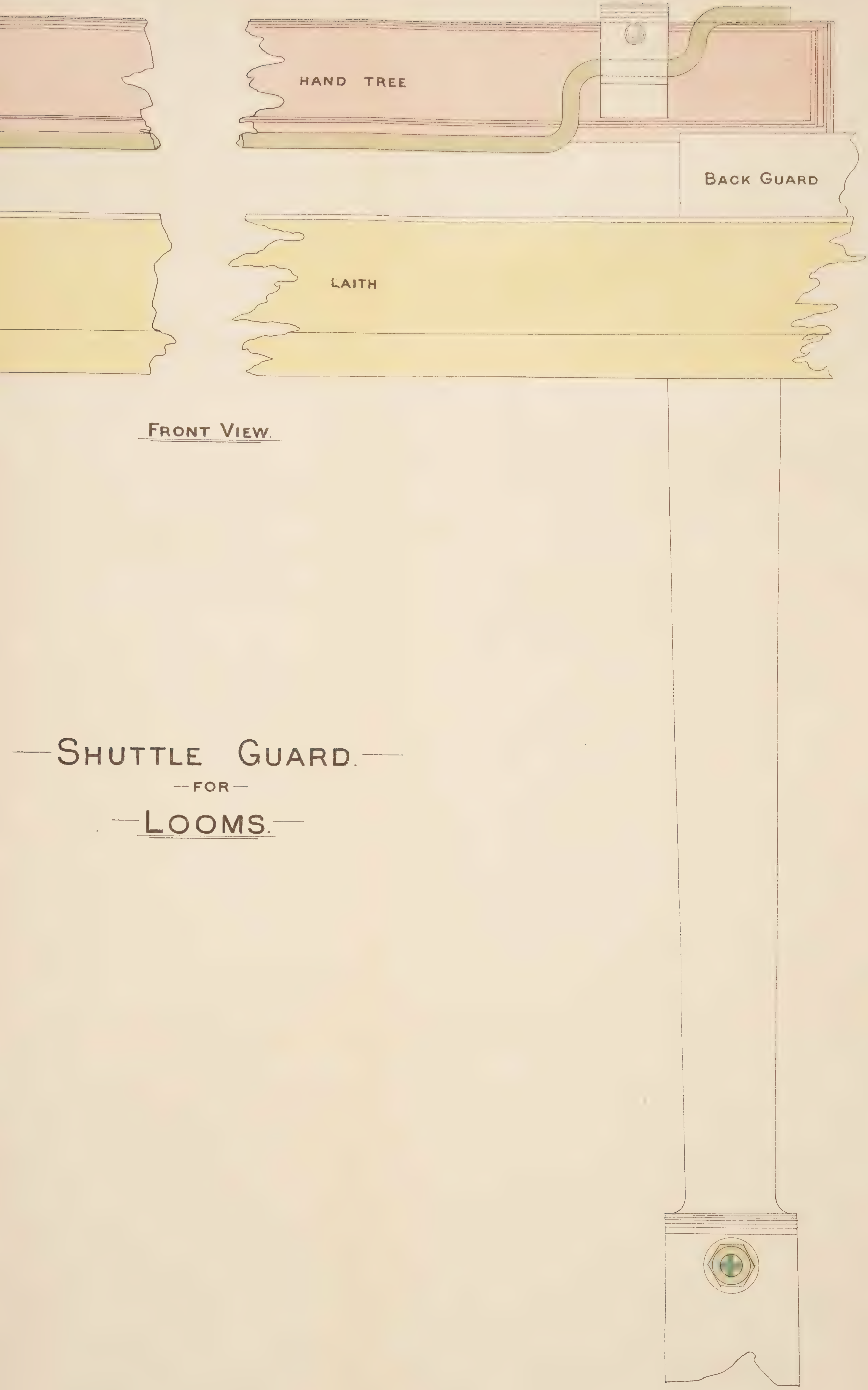
Mr. Beaumont, H.M. Inspector, Bradford, observes :—

"I am glad to say that shuttle guards are gradually being adopted The difficulty has been to choose the best from among the large number offered the price too, now, is very moderate."

Mr. Platt H.M. Inspector, Burnley, remarks :—

"I may be permitted to suggest to the manufacturers in my district the desirability of adopting some kind of shuttle guard. A short time ago a young woman lost an eye, owing to a flying shuttle; a few days after her sister met with an exactly similar fate, both at the same mill; 30*l.* was paid by firm as compensation. Directly after, another firm was called upon to pay upwards of 60*l.* for a similar accident. With such sad cases to quote I feel more than justified in bringing the question of shuttle guards to the manufacturers' notice.


BACK GUARD
END VIEW



FRONT VIEW.

SHUTTLE GUARD
FOR
LOOMS.

Wyman & Sons, Ltd. Lith, 63, Carter Lane, Doctors' Commons.

"I am not aware of any special kind of fencing I might mention beyond a shuttle guard at Messrs. Lord Bros. manufacturers and machinists, Todmorden. The guard has been fixed about six months. On my suggestion Captain May, R.N. accompanied me to see the guard. He called out several weavers, all of whom expressed themselves satisfied with the guard. They would not like to be without it. It is no hindrance to them; it is a bar guard and when a weaver wants to take up an end a single touch of the guard places it under the hand tree (or slay) and the moment the loom is put in motion the guard moves into position. I may add that Messrs. Lord Bros. have tried several guards and have fixed on this as being in every way satisfactory to them. I understand that there are many of those guards fixed in and about Rochdale, and being a Rochdale make (Mr. Haywood), a report from Rochdale might be most valuable. I beg to enclose a drawing."

Mr. J. T. Birtwistle, H.M. Inspector, Blackburn, observes:—

"During the year, I have received 13 notices of accidents through shuttles flying out of looms, in some cases resulting in the loss of an eye. I have done my utmost to persuade employers to adopt one of the many guards in existence, but, although I have repeatedly pointed out that one action under the Employers' Liability Act would doubtless cost them far more than the fixing of these guards, I am sorry to admit I had little or no success.

"As illustrating the difficulty I have experienced, there is a firm of cotton manufacturers in this district who are the patentees of a shuttle guard which they contend, and I am convinced, is a very efficient one, though rather expensive, about 5*s.* 6*d.* per loom; they have had at their mills, within the past 2½ years, 3, if not 4, shuttle accidents; I have up to the present, been unable to get them to affix their own invention on their own looms.

"The objections taken by employers to the fixing of shuttle guards are various, but in my opinion, guards are now in existence which meet every tangible objection, and can be had for, say, 1*s.* per loom, for a simple fixed iron bar, to 5*s.* or 6*s.* for an automatic and thoroughly efficient guard."

Mr. Pearson, H.M. Inspector, Rochdale, reports:—

"There has been a great number of shuttle accidents during the year, and some of a very serious nature; when investigating these I have always advocated the use of shuttle guards, and in some cases they have been applied with beneficial results. In other cases, however, objections have been made somewhat similar to the following from Messrs. John Pilling, Limited, Norwich St. Mills, Rochdale.:—

"'SIR, June 14th, 1893.

"'We have 1,315 looms, none of which are fitted with shuttle guards.

"'We have tried every guard we have seen or heard of, and find them useless. On one occasion, one guard we were trying appeared so likely, that our weavers actually went on strike to have them put on all through the sheds, and when we had 300 or 400 fixed they all went out on strike to have them taken off again.

"'There are none made that I know of, which are not liable to get out of order and cause far more accidents than being without.

"'We have only had one serious accident in 22 years.

"'Yours truly,

"'pro. John Pilling, Limited,

"'JOHN S. PILLING.'"

"I had visited the above mill to make inquiries in regard to two shuttle accidents and advocated guards each time, but on receipt of notice of a third accident I wrote to the firm and received the above reply.

"I have felt some difficulty in meeting statements of this kind, until recently when, I, along with Captain May, visited several weaving sheds where guards are in use, made by Mr. A. Heyworth, Lomax St., Rochdale.

"At all the Mills visited, both managers, tacklers and weavers were highly satisfied with the guards and said they 'would not like to be without them.'

"I am perfectly satisfied that whilst these guards prevent accidents, they do not interfere with production, and am of opinion that the use of shuttle guards on cotton looms should be made compulsory."

Mr. Tinker, H.M. Inspector, Bolton, remarks :—

"*Shuttle Guards.*—Having had 20 years practical experience as a weaver, a loom twiner, and manager of looms, I can lay some claim to give an opinion on this subject, and I may at once say that I have hitherto been very sceptical as to having seen a good shuttle-guard, one that would not prevent loss of wages to the weaver. I can give numbers of cases where looms have been made and delivered with shuttle-guards, and before the looms have been working three months, the weavers have petitioned the employers to take the guards off. A few weeks back I decided to ask a number of managers of weaving departments to meet me at the Bolton Technical School (the chairman of the committee having very kindly granted me the use of the looms, the driving power, and a room in which to hold the meeting), for the purpose of discussing the desirability of shuttle-guards, and to test the success or failure of some of those already in use. The meeting took place on Saturday the 4th instant, the number attending having the management of the working of upwards of 23,000 looms. Several shuttle-guards were attached to looms in the school, and practical tests made of their efficiency in preventing the shuttle from flying out from the shed, upon a number of warp threads being fastened together.

"Upon those present being asked to fearlessly express their opinions, several prominent manufacturers and managers spoke discouragingly of the application of the guard, giving it as their opinion that it hindered production. Others, admitting that there might be some objection on the ground of its being a slight hindrance, still claimed it to be efficient in preventing weavers from being struck anywhere about the head. The general concurrence of opinion was to the effect that a shuttle-guard is desirable, but that none had yet been invented which the weavers admit they prefer to have on their loom rather than run risk of accident. Ultimately the following resolution was moved and adopted :—'We, 'the weaving managers of Bolton and district, are of opinion that up to 'the present time we have not seen a shuttle-guard that meets the 'requirements of the trade, and would not like to be compelled to put 'them on until we meet with an efficient one that is approved by the 'trade.'

"Notwithstanding the resolution proposed and carried, I have confidence in saying a shuttle-guard will soon be in the market that will give satisfaction to the weaver, the manager, and the employer, and that at no distant date all the looms in this district will have shuttle guards fixed thereon."

Mr. Ashworth, H.M. Inspector, Ashton-under-Lyne, observes:—

"There have been three accidents from flying shuttles reported; one of these caused the loss of an eye to the weaver; she obtained 60*l.* as compensation, and was taken back again in the same mills and employment found for her. I have paid great attention to the question of shuttle-guards, with the result that a very large number have been put on the looms since I came here, and in other cases a trial is being made of different guards, preparatory to a decision being come to as to which guard will be adopted. The cheapest form of shuttle-guard is a stout wire fixed to the slay, but the weavers very often object to this, that it interferes with their 'taking in;' this is no doubt true, but there are other guards which are not open to the same objection, that is, instead of being fixed and immovable to the slay, they are made to swivel over at each end, the advantage gained here is, that when the weaver wishes to "take in," she can push the guard out of the way, and when she has finished, push it back again into action. There are a very large number of shuttle-guards in the market, and I think that, probably, all answer the purpose for which they are intended. The Waterside Ironworks Company, Dukinfield, have brought out a very effective shuttle-guard, it acts automatically, that is, it is always in action when the loom is running, and is always out of position, consequently out of the weaver's way, when the loom is stopped."

VI.—Sanitary Authorities and Workshops.

It will be observed, by the following reports of H.M. Inspectors, that the local authorities have done very little under the powers conferred on them by the Act of 1891.

The provisions contained in Section 3 (3) very rarely receive attention, the main reasons being that the medical officers of health are reluctant to add this work to their other duties, and the local authorities are averse to add to local taxation by the appointment of a sufficient number of sanitary inspectors; of course, if a district was to any serious extent in an insanitary condition, I should report the facts to you in order that, under the powers conferred by Section 1, Factory Act, 1891, special officers might be appointed, but there is no reason to believe that such a state of things exists, as any serious complaint would receive attention from the medical officers of health.

Mr. Blenkinsopp, H.M. Inspector, remarks:—

"The Act of 1891 having thrown the duty of carrying out the sanitary provisions in workshops on to the local authorities, you ask what amount of co-operation I have received from them? I may begin by stating that prior to 1891, when it was the duty of the medical officer of health to report to the factory inspector bakehouses in which children, young persons, or women were employed, I never received a single notice from any such source. One case was reported to me by a clergyman, and another by a policeman, the first case led to a prosecution. Early this year I went into a bakehouse in a certain town, I found a young person at work, also a child working full time. I asked whether the medical officer had been there, and the reply was, 'Oh yes, he is our doctor.' 'But has he ever been in the bakehouse?' 'No.' 'Has

'the sanitary inspector never been here?' 'He has been up the yard, 'but never in the bakehouse.' I prosecuted for the illegal employment of the child.

"Soon after the Act of 1891 came into force I had a long illness, but after my recovery and return to work, I, in the autumn of last year, drew up the following letter:—

"'Sir,

"'By the Act of 1891 it is the duty of the local sanitary authority to inspect all workshops (not factories), and enforce the sanitary regulations.

"'I am instructed to forward to such authority all notices that I receive of persons 'beginning to occupy' workshops.

"'I now enclose one such notice, and it will not be necessary for me in future to send any letter along with the notices.'

"After a short time I made the following addition, 'I am also 'instructed to ask that when, during your inspection, you find any 'workshop in which children, women, or young persons are employed 'and no Abstract of the Workshop Act exhibited, you will kindly send 'the name and address to me in order that an Abstract may be supplied.'

"I do not think that I have received more than two acknowledgments of the above. I find that I have sent 63 notices of 'beginning to occupy;' and, in those places where a notice had not previously been sent, a copy of the above letter. No notice of any workshops has been sent to me by any medical or sanitary authority, until the other day one came from a medical officer to whom I had a day or two previously expressly written on the subject. I cannot ascertain that any special inspector has been appointed in any district, and certainly no registers have been made. One drawback is that some of the districts under a medical officer of health are very large, and it is probable that, unless there is some special enquiry or something serious occurs, the officer never visits the more distant places at all. That, at least, is what several local doctors have told me.

"In answer to more recent inquiries, various replies have been received. The clerk to the Wellington board states that no special lists of workshops have been made because their sanitary inspectors are aware of them all. One medical officer said that he had made no inspection and did not intend doing so for his present pay. From another place I hear that the surveyor and the sanitary inspector are making a special inspection. Some have made no reply. At Luton the medical officer took the matter up vigorously from the first. He is the only doctor who has asked for any workshop register. In a widely extended district like this, comprising four whole counties and parts of four others, it is not easy for the factory inspector to be so much 'in touch' with the various local authorities, as in a more concentrated district. On the whole, I think that I may say, that while some authorities have done nothing, a good many have done something, a few have done a good deal, and that more would come under the latter category if their duty were more fully explained."

Mr. Bignold, H.M. Inspector of Factories at Norwich, writes:—

"In four of the large towns, *i.e.*, in Norwich, Ipswich, Colchester and Cambridge, *lists of 'outworkers'* have been prepared at my instance, in the form ordered by the Home Secretary in September 1892, from which it appears that there are over 10,000 '*outworkers' places*' in these four towns, which, except in the case of Ipswich (*see* Report enclosed), have remained entirely un-inspected by the sanitary officers of the local authority. I cannot find that I have any right of entry into these places, if the outworker *employs no one*, but the sanitary officers

have such right under the Public Health Act, and, no doubt, they would be prepared to exercise it, if the Local Government Board instructed the local authority that the work *must* be done. It is idle to suppose that the overworked and underpaid medical officers of health can undertake such an important addition to their duties without a large addition to their staff, or their salaries.

"In the case of Colchester and the adjacent Hundreds of Lexden and of Tendring, I find that there are nearly 3,000 *outworkers* employed by the large firms of tailors and outfitters in Colchester, in Ipswich, and in London, and, I believe, that in this way there is considerable 'sweating' with which I am powerless to deal, by this I mean (1) that the wages paid to outworkers are less, by 10 to 35 per cent. than the wages paid for similar work done in factories; (2) that the hours of work are longer than in factories or workshops under the Act; and (3) that the sanitary condition of the outworkers' places of work is very much worse than that of factories and workshops. I feel bound to add that great disappointment is expressed that nothing has been done in this matter in Colchester and the neighbourhood since I notified to you early in the present year that, in accordance with the order of the Secretary of State, lists of outworkers had been prepared in the prescribed form. But, I am glad to add, that I have *today* received notice that a sanitary officer has been appointed by the Town Council of Colchester to perform the much needed inspection of *outworkers' places.*

"I regret to say that the medical officer of health for Norwich does not see his way at present to any inspection of the vast number of outworkers' places in that city, the Town Council apparently being unwilling to incur the necessary outlay."

"'Sanitary Inspector's Office, Corn Exchange Chambers,
Ipswich, November 2nd, 1893.

"'SIR,

"'I BEG to enclose summary of register of outworkers in Ipswich.

565 Tailors and Tailoresses.
241 Bootmakers.
139 Corset makers.
44 Shirt and underlinen makers.
13 Cabinet makers and Upholsters.
4 Glovers.

"'The tailoresses seem to be paid a very low wage. I am told by some of them that they are only paid 4½*d.* per pair for trousers and the like for waistcoats, and 10*d.* for coats, and find all thread and cotton. One of the female outworkers told me that they used to be paid 1*s.* 10*d.*, and sometimes 2*s.* per coat, but have been gradually cut down to 10*d.*

"'I think the female outworkers, like many other people, make Saint Monday and sometimes work late into the night.

"'The bootfinishers do not appear to be paid much better, as a man and his wife stated they could only finish one dozen and a half pairs by working from early morn to very far into the night, and only earn 4*s.* 6*d.*

"'As far as I can understand the other trades are paid fairly well.

"'I certainly think the work ought to be done in well-ventilated and light workshops, instead of which I find very many are working in small back rooms and bedrooms.

"'I am having several sanitary amendments carried out, which have been brought to light on visiting some of the outworkers.

"'I am, &c.,
(Signed) GEORGE MOSS.
Sanitary Inspector."

"'J. H. Bignold Esq.

Mr. Bowling, H.M. Inspector, observes :—

"I find that the co-operation I receive from medical officers of health and local authorities in the matter of workshops is still limited to the case of a few large towns. In Portsmouth, Southampton, Bridport, Poole, Gosport, Weymouth and Winchester, more or less activity has been shown in the matter of the sanitary inspection of workshops, but only in the first two can I report that there has been a systematic effort made to carry into effect the provisions of the Factory and Workshops Act, 1891, and the Public Health Acts, 1875, as touching workshops.

"Both in Portsmouth and Southampton, the work is being well done, and reports by the specially appointed officers are most readily and courteously supplied to me, and have proved to be of great use. I am more than ever convinced that the only means of securing a proper observance of all the provisions of the Factory and Workshops Acts and the Public Health Acts in 'Workshops,' will be the compulsory registration and licensing such of all places, as previously advocated by me and many others of my colleagues."

Mr. Cooke Taylor, H.M. Inspector, reports as follows :—

"*Local Authorities and Workshops* :—In only one instance within my sphere of operations have I received any considerable help in the inspection of workshops, namely in the instance of Northampton, where an officer was appointed some time ago to go round them for sanitary purposes and send me lists of where women, young persons, or children were employed. Even in this instance the effort seems to have come to an end, for the last list sent me is dated as far back as last March. In general, where I have called the attention of medical officers of health to their obligations in connection with factory legislation I have received no response whatever, sometimes a pretence of co-operation has been made for a while; in a few instances my overtures have been met with positive discourtesy. I know of no cases in which registers of workshops, with the particulars mentioned, are kept, nor in which cards of the kind stated have been issued.

Mr. Jones, H.M. Inspector, Plymouth, remarks :—

"The handing over to the local authorities of the sanitary supervision of workshops has been of no assistance to me as regards furnishing me with lists of places in which children, women and young persons are employed and in which the Abstract of the Act is not posted.

"The medical officers of health, without exception, object to a considerable increase of work without a corresponding increase of salary; all agree in saying that for the amount of work they have to perform the remuneration is insufficient. Details which the authorities request them to forward to me would, naturally, greatly add to their work, and they politely decline to furnish the information. I cannot remember a single instance where I have received any valuable aid from local authorities. Practically, in Devonshire and Cornwall section No. 3 is a dead letter.

"No special inspectors have been appointed nor have I heard of any circulars being issued to occupiers of workshops by any corporation or local board."

Mr. Beaumont, H.M. Inspector, Bradford, reports :—

"In Bradford I am glad to say an inspector has been specially appointed to carry out, under direction of the local authority, 'The Shop

Hours Act,' and, in conjunction with the medical officer, to see to the sanitary condition of workshops throughout this borough. This work is well done, and is a great help to me."

Mr. Cameron, H.M. Inspector for the Central Metropolitan district, remarks ;—

"With regard to workshops, the great bulk of these in the central district come within the metropolitan area, which has been placed under the supervision of H.M. Superintending Inspector of Workshops. I may say, however, that outside this area, though within the district, there is a considerable number of small country towns in which, of course, are the usual workshop industries. So far as my brief experience extends, I am unable to record any special co-operation on the part of the authorities in these centres, nor have I become aware of any special arrangements made to ensure satisfactory sanitary conditions."

Capt. Kindersley, H.M. Inspector, Edinburgh, observes :—

"With regard to the supervision of the sanitary condition of workshops, I know that Dr. Littlejohn, the energetic health officer of Edinburgh, is doing his best to carry out in this city the regulations of the Act, with such means as he has at command, and in some other towns in my district, such as Dunfermline, Stirling, &c., the local authorities have appointed the superintendent of police as the local inspector for the administration of the Shop Hours Regulation Act, and the workshops are, therefore, well looked after in those places. But of course in comparatively small country towns, there is not the same pressing necessity for such careful and frequent inspection of workshops as in large cities, the hours of work being usually shorter in the country and the surroundings in every way more favourable to health and comfort.

"In this connection I may mention that a weekly half-holiday commencing at 1 or 2 o'clock is the almost universal custom now for both shops and workshops of every kind in all the country towns in my district.

"The day seclected is usually the middle of the week, Wednesday or Thursday."

Mr. Richmond, H.M. Inspector, Liverpool, reports :—

"I have from time to time been in communication with the different sanitary authorities in my districts, and have urged on them the carrying out of their duties under the Act of 1891. In August last I sent out a circular, of which a copy will be found on the page 273, asking for information on the subject.

"I append the replies I have received in brief:

LANCASHIRE:

Liverpool.—Registers kept. Systematic inspection carried on. Cards issued to be hung in workrooms. Notices regularly sent under Section 3 (3).

Bootle.—Register kept. Cards issued. Inspections made. Notices sent under Section 3 (3).

Garston.—No register. No cards. Some workshops visited. No notices under Section 3 (3).

Prescot.—Nothing whatever done.

Widnes.—No answer. Some workshops have been visited, I know. No register. No cards. No notices under Section 3 (3).

St. Helens.—Register kept. Workshops inspected. Cards issued. Notices sent under Section 3 (3).

CHESHIRE :

Chester.—Register kept. Workshops visited. Cards issued. Notices sent under Sect. 3 (3).

Birkenhead.—Register kept. Workshops visited. Cards issued. Notices sent under Section 3 (3).

Hoylake and West Kirby.—Register kept. Inspection made. Will get cards and send notices under Section 3 (3).

Runcorn.—After failing to get a reply from the medical officer of health, I applied to the secretary of the Runcorn Improvement Commissioners, who undertook to bring the matter before the Board. I have since heard from him, stating he had obtained a register, and asking for a specimen card.

Frodsham and Helsby.—No reply. Only a few workshops.

FLINTSHIRE :

Flint.—Register kept. Inspection made. Cards issued.

Holywell.—Nothing done. Medical officer of health promised to place my letter before the local board.

Rhyl.—No register or cards, but the medical officer of health asked for specimens, and promised to see that they were put into operation. Some workshops visited. No notice under Section 3 (3).

Mold.—Medical officer has brought the matter before the local board.

St. Asaph.—No answer. Nothing done.

Hawarden.—No answer, but only one or two workshops.

DENBIGHSHIRE :

Denbigh.—Nothing whatever done.

Ruthin.—Nothing done. Medical officer submitted my letter to the town clerk, who promised to bring the matter before the town council.

Wrexham.—Register kept. Inspections made. Cards issued. Notice sent under Section 3 (3).

Ruabon.—The medical officer of health replies "yes" to all four queries in my circular.

Llangollen.—No answer. Nothing done.

Abergele.—No answer. Nothing done.

Llamont.—No register. No cards, but notice as to provisions served on all occupiers. No notice under Section 3 (3).

MERIONETHSHIRE :

Corwen.—No answer. Nothing done.

Bala.—No answer. Nothing done.

Dolgelly.—Nothing done; but clerk to local board instructed to say that the subject is under consideration, and that duties will be attended to.

Barmouth.—No register. No inspection unless workshops suspected to be insanitary.

Blaenau Festiniog.—No answer. Nothing done.

ANGLESEY :

Beaumaris.—No answer. Nothing done.

Amlwch.—No answer. Nothing done.

Holyhead.—No answer. Nothing done.

CARNARVONSHIRE :

Carnarvon.—Register kept. Inspection made. No cards. Notice under Section 3 (3) sent.

Bangor.—Nothing whatever done.

Llandudno.—No register. Inspection made. Some cards issued. Notice under Section 3 (3) sent.

Colwyn Bay.—No reply, but visits to workshops have, I believe, been made by sanitary officer, who expressed great willingness to carry out the Act.

Penmaenmawr.—No reply. Nothing done.

Conway.—No reply. Nothing done.

Bethesda.—No reply. Very few workshops.

Llanberis.—No reply. Nothing done.

Nantlle and Penygroes.—No reply. Nothing done.

Portmadoc.—No reply. Nothing done.

Pwllheli.—No reply. Nothing done.

"It will thus be seen that the following 11 towns are already carrying out the provisions of the Act satisfactorily, viz.:—Liverpool, Bootle, St. Helens, Chester, Birkenhead, Hoylake, Flint, Wrexham, Llandudno, Carnarvon and Ruabon; whilst Runcorn and Rhyl have made promises. I fear, however, that they will not be universally observed, unless it is made compulsory for local sanitary authorities to keep registers of workshops in a prescribed form and with prescribed particulars, and to produce them to H.M. Inspectors when called upon.

The following is the circular issued to the various local authorities:—

"Home Office, Whitehall, London,
August 1893.

"Dear Sir,

"I am desired by the Home Office to make the following enquiries as to the means taken by your local sanitary authority to carry out the provisions as to workshops, imposed upon them by the Factory and Workshop Act of 1891.

"1. Is a register of workshops kept, with the requisite particulars as to cleanliness, ventilation, overcrowding, &c.?

"2. Has any inspection of workshops been made with a view to the above provisions?

"3. Have cards been issued, to be hung up in workrooms, stating the cubical contents of the rooms, and the number of hands that may be employed in them, allowing 250 cubic feet for each person?

"4. Has written notice, in accordance with Section 3 (3), been given to H.M. Inspector of Factories of the district, of workshops wherein any child, young person, or woman is employed?

"Yours faithfully,
"H. S. Richmond,
"H.M. Inspector of Factories."

MOLD LOCAL BOARD.

Extracts from Reports of Edward Williams Esq., Medical Officer of Health.

13th September, 1893.

Before concluding I have to drew the attention of the Board to an official letter I have received from Mr. H. S. Richmond, H.M. Inspector of Factories, and which I lay before you, as to the requirements of the Factories Act of 1891, and which I have before drawn attention to in a report dated November 26th, 1892. I must, as upon former occasions,

impress upon your authority the necessity of serious and active attention to sanitary matters, now that we are threatened with a visitation of that terrible disease "cholera," and ask your sanitary inspector to frequently visit lodging houses, slaughter houses, and places where his attention has been called to, and rectify insanitary matters, not only by giving formal notice, but by seeing that such notice is carried out, as far as the Public Health Act will allow.

1st November, 1893.

Workshops.—With reference to a letter presented to your authority from H. S. Richmond, Esq., H.M. Inspector of Factories, and which I mentioned in a report dated 13th of September last, as to the inspection of workshops by the sanitary officials, I consider that all such places should come under their observation, in order that infectious diseases may not be disseminated through the manufacture of wearing apparel, and that sections 3 and 33 of the Factories and Workshops Act, 1878, be strictly carried out.

COUNTY BOROUGH OF ST. HELENS.

Factory and Workshops Acts.

This workroom has accommodation for———hands.

When this workroom is used after 8 p.m. it has accommodation for ———hands.

At all times the means of ventilation must be kept in working order, otherwise the above numbers will produce overcrowding, which will be dealt with under the above Acts.

Robt. McNicoll, M.R.C.S.,
Medical Officer of Health.

Notice to Owners and Occupiers of Factories, Workshops, Workplaces, and Laundries.

Abstract

Of certain Provisions of the Factory and Workshop Act, 1891, which came into force on the 1st of January, 1892, which are to be enforced by Sanitary Authorities.

Workshops.

By this Act all Workshops within the meaning of the Factory and Workshop Act, 1878, are in future to be under the control of the Corporation of St. Helens, being the sanitary authority of the district, as regards the regulation of their sanitary condition, and the provisions of the Public Health Act, 1875, now apply to them.

Nuisances.

The result of this alteration of the law is that any workshop, as well as a workplace, which is :—

(1) Not kept in a cleanly state;

(2) Not ventilated in such a manner as to render harmless, as far as practicable, any gases, dust or other impurities generated in the course of the work carried on therein that are a nuisance or injurious to health; or is

(3) So overcrowded while work is carried on as to be dangerous or injurious to the health of those employed therein;

(4) Which is not kept free from effluvia arising from any drain, water-closet, earth-closet, privy, urinal, or other nuisance;

is to be deemed to be a nuisance and may be dealt with as such under the provisions of the Public Healt Act.

Cleansing.

In addition to these provisions it is enacted that, where, on the certificate of the medical officer of health, or an inspector of nuisances, it appears to the Corporation of St. Helens (being the sanitary authority) that the limewashing, cleaning, or purifying of any workshop, or any part thereof, is necessary for the health of the persons employed therein, the Corporation of St. Helens shall by notice require the work to be done, under a penalty of ten shillings a day for default.

Power of Entry.

For the purpose of carrying out their duties as to workshops, the Corporation of St. Helens and its officers, in addition to their powers under the Public Health Acts, have all such powers of entry, inspection, taking legal proceedings, or otherwise, as H.M. Inspector of Factories possess under Part III. of the Factory and Workshop Act, 1878, but without having, as was formerly the case, to obtain the special authority of the Secretary of State. These powers of entry and inspection are such as to enable the Corporation of St. Helens and its officers to inspect premises at all times when work is carried on, and at other times under certain circumstances.

Powers of Factory Inspectors as to Sanitary Defects.

Where it appears to an inspector of factories, that any act or default in relation to any drain, water-closet, earth-closet, privy, ashpit, water supply, nuisance, or other matter of a factory, workshop, or laundry, is punishable under the Public Health Acts, he is required to give notice to the sanitary authority, whose duty it will then be to enforce the law, but if they fail within a reasonable time to take action, the inspector may himself take proceedings.

FACTORIES.

Provisions as to safety in case of Fire.

In the case of every factory, the construction of which is commenced after the 1st January, 1892, and in which more than 40 persons are employed, it is now necessary that a certificate shall be obtained from the Corporation of St. Helens that such factory is provided on the storeys above the ground floor with such means of escape in case of fire, for the persons employed therein, as can reasonably be required under the circumstances of each case.

All factories which were in existence on the 1st January, 1892, and in which more than 40 persons are employed, must be provided with such means of escape, and the owner may be required, by notice from the Corporation of St. Helens, to carry out all measures necessary for providing the same, by a date to be specified, subject in case of default to a fine of one pound a day.

WILLIAM JOHN JEEVEL.
Town Clerk.

Mr. Woodgate, H.M. Inspector, Dublin, observes:—

"The duty of enforcing the sanitary arrangements in workshops devolves on the local medical officers of health, while the sanitary arrangements in factories come under H.M. Inspectors of Factories as well as the sanitary authorities. I am informed by Sir Charles Cameron, Superintendent Medical Officer of Health, Dublin, that there is no systematic inspection for sanitary purposes in Dublin, but that action is taken immediately on any complaint. I think the same may be said of most of the other towns in this district."

Mr. Hoare, H.M. Inspector, Wolverhampton, observes:—

"*Local Authorites.*—I have been in communication with the medical officers of health of all the principal places in the district. I find that they attend to all notices and complaints which I send, but as far as I can hear, they carry out the enactments of 1891 in a half-hearted way.

"In Wolverhampton the inspector of nuisances has been to several workshops some months back and told the occupiers they must limewash, but three months after they had not done it. I cannot learn of any register being kept.

"In Willenhall the regulations are being carried out most satisfactorily, but the medical officer before undertaking these new duties asked for and obtained an increase of salary.

"In Stourbridge an inspector has, I believe, visited all the workshops to see that the regulations in sanitary matters are being duly carried out.

"In Shrewsbury the medical officer, who is also medical officer for several other unions, is aware what the Act of 1891 requires, but I cannot learn that he is carrying them out systematically.

"In Oswestry the medical officer looks after sanitary matters thoroughly.

"In Wales I do not hear of anything being done.

"No medical officer, save the one in Willenhall, appears 'aware' that protected hands are employed in any workshops.

"Some of the medical officers say that the small salary they are paid for their services is not adequate remuneration for more than their present duties. I see no prospect of medical officers carrying out this additional work in a satisfactory way unless they are paid for it, this will of course cost more money than the old plan, I hope the result may prove satisfactory, I doubt if it will ever produce uniformity.

"I do not find it has made any reduction in my work, but it adds considerably to my correspondence."

Mr. Maitland, H.M. Inspector for the Preston district, lately removed to the Bristol district, reports as follows:—

"The Preston district, as you are aware, embraces North Lancashire, all Westmoreland and Cumberland, with part of Yorkshire. I did not receive, during the whole time I had charge of that district, a single written notice from any sanitary authority, in accordance with section 3, Factory Act, 1891, of workshops in which children, young persons, or women were employed. In some few towns the local authorities appeared to have taken some feeble steps with regard to the sanitation of workshops, but in most towns in the district I never heard of anything being done in the matter at all. In Bristol, where I now am, a

different state of things exists. I receive numbers of written notices of workshops in which protected persons are employed, and on every hand I find ventilation improved, new water-closets, &c., put in; all the work of the sanitary inspector of workshops for this city."

Captain Smith, R.N., H.M. Inspector, Sheffield, observes :—

"*The Inspection of Workshops.*—Of these there are in my district—

Registered in the city of Sheffield - -	1,172
Registered in my county district - - -	1,205

"These are not, I think, being inspected in a systematic or satisfactory manner. I submit that whereas the intention of the Act of 1891 was excellent inasmuch as it recognised that scattered over every corner of the kingdom we have an army of sanitary inspectors and in every district a skilled medical officer to direct them and that such a force could and should be utilised, yet the hopes raised have not been realised, and the cause is to be found in mere detail; whereas new and important duties fell upon local authorities responsible to their constituents for expenditure, and often living amongst workshop occupiers, it has remained optional whether to accept or ignore these new duties.

"An indirect form of compulsion might be found in requiring the 'license to employ young persons women or children in a workshop,' or indeed this might for sanitary reasons be extended to men.

"Were this enforced, local authorities would have to see workshops before granting licenses and occupiers by the terms of their license would feel secure so long as they fulfilled conditions which, when understood, would, I doubt not, be heartily accepted.

"We, as inspectors under the central authority, would prosecute for failing to procure a license or for failing to fulfil the conditions imposed and in supporting such an information we would present a real offence and receive magisterial sympathy, which certainly is not often accorded when we prosecute for the mere technical offence (generally committed in ignorance) of 'not giving notice of occupation.'

"By the courtesy of the town clerk for the city of Sheffield I am enabled to forward (Enclosure No. 1.) a report showing what has been done by the inspector appointed by the city council under section 7 of the Factory Act 1891; this report shows that adequate means of escape in case of fire were wanting in a large number of important works, and it is satisfactory to see that prompt measures have been taken to remedy these defects.

"I have also to thank Mr. Harry Littlejohn, medical officer of health for Sheffield, for the return enclosed (Enclosure No. 2.), also forwarded by the town clerk.

"I am much indebted to Mr. Littlejohn for the prompt and careful consideration he has given to my representations relating to sanitary defects; the return enclosed, and a similar one forwarded last year will show that much has been done to remedy evils of this nature, but in other respects the return is far from satisfactory.

"It will be seen that only 896 visits have been paid to workshops, these visits are not, I understand, made on any system, but the various inspectors keep lists for themselves and visit as convenient.

"No registers with details are kept at the central offices.

"Only 13 notices of new workshops have been sent to me by the local authority, but we have sent 171 such notices to them.

"Reports of new places are, of course, sent to us, but I cannot help thinking that the number (13) of new places in which protected persons are employed discovered by the sanitary officers, is very small.

"Lastly, the officers of the local authority should have under them a few special officers for the sanitary inspection of workshops, and registers should in a systematic way be kept by them.

"Since February 1892 I find that we have sent to the numerous medical officers in my district 352 names of occupiers of new workshops, whilst (including the 13 sent by the medical officer for Sheffield), we have received at most 20 names."

With reference to outworkers, Captain Smith remarks :—

"After most careful inquiry a clause (section 27) was inserted in the Factory Act of 1891, requiring that, when required by the Secretary of State, lists of outworkers should be kept by any specified trades, and that such lists shall be open to the inspector under the principal act or by an officer of the sanitary authority.

"An order by the Secretary of State required such lists to be kept in the clothing trades in the electro-plate trade, in the manufacture of files, in cabinet and upholstery work, and in the manufacture of furniture hangings. The intention was obvious, that such lists should be examined and the workplaces seen, but not one single examination has been made by the local authority.

"Manufacturers have at great trouble kept these lists, and for no useful purpose.

"To give an idea of the number of places that should be seen, I may mention that on one list lately examined by me I find no less than 97 names, on another 47; these are not exceptional cases.

"The medical officer of health and his staff have doubtless done their best, but their hands have been full.

"In the numerous other large towns under my inspection, the requirement as to sending me lists of names of new workshops is a dead letter, and I have never heard of any examination of lists of outworkers."

" 'Report of Inspector appointed under Section 7 of Factories Act, 1891.

"All the places named in the list supplied by Commander Hamilton Smith (1,150 in all) have been visited. Up to 30th September last over 1,300 visits had been paid.

" 'The places visited may be classified as follows :—

Class I. (less than 40 hands employed) - -	684
Class II. (all ground floor) - - -	115
Class III. (adequate) - - - - -	272
Class IV. (inadequate) - - - -	79
	1,150

" 'The places without adequate means of escape, it will therefore be seen, amount to more than 20 per cent of the total number coming within the scope of the Act.

" 'Up to September 30th, eight staircases of incombustible material and seven iron escape ladders had been provided or were in hand, and

in twenty cases through communication had been or was being formed by making new doors and reopening old ones, providing egress from windows, and altering position or method of opening doors on to gangways (external) or other portions of the premises.

" 'The remaining places are under consideration, and will be dealt with in due course.

" 'City Surveyor's Office, Sheffield.
" '9th October 1893.

" 'Town Clerk's Office, Sheffield,
28th October 1893.

" 'DEAR SIR,

" 'IN further answer to the questions contained in your letter of the 2nd instant, I beg to send you the enclosed schedule of the questions, and the answers thereto.

" 'Yours truly,
J. W. PYE-SMITH,
Town Clerk.' "

" 'Commander Hamilton P. Smith,
Heatherleigh, Sheffield.

QUESTIONS.	ANSWERS.		
1. Number of notices as to new workshops received from Mr. Smith by the medical officer of health	171		
2. Number of notices sent to him by the sanitary authority intimating that women, children, or young persons are employed in a workshop	13		
3. Number of workshop inspections by the sanitary authority	896		
4. Number of examinations of list of outworkers in the electro-plate and clothing trades, in the manufacture of files, and in cabinet and furniture making, and in upholstery work	Nil.		
5. Number of notifications received from Mr. Smith relating to sanitary defects in factories and workshops, and the result	34		
	Complaints received	34	Action taken.
	Insufficient privy accommodation	4	3 dealt with, 1 in abeyance.
	Offensive urinal	1	Dealt with.
	Defective ventilation	2	1 ventilated, 1 in hand.
	Limewashing	18	All attended to.
	Defective drainage	2	Dealt with.
	Offensive privies, &c.	4	Dealt with.
	Other complaints	3	Dealt with.
		34	
6. Number of visits to workshops or dwellings occupied by outworkers named in the list of outworkers before referred to	Nil.		
7. Are any registers of workshops kept	Yes.		

Captain Bevan, H.M. Inspector of Factories, Nottingham, remarks :—

"The medical officers in the principal towns are enforcing the sanitary clauses of the new Act in workshops fairly well. The work done in

Nottingham I mentioned last year as being exceptionally good, such as the appointment of a lady inspector and the issuing of various notices. In Lincoln also some attention has been paid, and in Newark and Mansfield, but in the smaller towns, and where the area of the rural sanitary authority is large, very little is done; in some cases the local authorities state that they have received no instructions.

"The bakehouses seem to be well and constantly visited; but still many exist underground, of course, of old construction. This is the case especially in Nottingham. I had, during the year, occasion to visit these bakehouses early in the morning, and found them close and dingy, and the ventilation of a doubtful character. The sooner they are abolished the better. I am of opinion that no underground workshop should be allowed, more particularly a bakehouse.

"Respecting receiving notices of the employment of protected hands in workshops from the local authority, it is with me, except in a few cases, almost a dead letter, although I have visited the majority of the medical officers of health on the subject. I think some more definite instructions to them are required: ignorance of such duties generally being urged by them."

M. Knyvett, H.M. Inspector, Birmingham, observes:—

"The inspection of workshops by the sanitary authorities in my district is, I think, on a fairly satisfactory footing. The local authorities in Birmingham and Aston carry out their new duties of inspection very thoroughly, but I cannot say the same thing of my country districts."

Captain Armstrong, H.M. Inspector, Leicester, observes:—

"I have to report, in regard to the inspection of workshops by the local authorities, that little appears to have been done in my district. In Leicester the inspection of workshops is undertaken by the medical officer of health and his staff, and I understand that a register of workshops is being prepared. With regard to the co-operation received from the medical officers of health, I have received no notices in accordance with section 3 (3), Factory Act, 1891, except from the medical officer of health for Kirby, who forwards me notice of any such workshops which come under his notice."

Major Roe, H.M. Inspector, Birmingham, observes:—

The greater part of my district lies within and immediately around the city of Birmingham, and therefore the medical officer of health of this city is the principal local authority I have to deal with, with reference to workshops under the Act of 1891. I have always received the cordial co-operation of this officer, and have found that his subordinates, the inspectors of nuisances, since the health provisions of the Act have been placed under him, have systematically carried out the inspection of workshops, and are making good headway in overtaking the whole in this city. Registers are kept with full particulars of the number of hands employed and the capacity of the rooms (250 cubic feet being allowed for each hand), the state of the workrooms, water and other conveniences, if an abstract of the Act is affixed, &c., and these registers are open to my inspection, but the system of having cards affixed in the workshops to show the number of hands allowed has not been adopted.

"Through a misunderstanding the notices under section 3 (3) of the Act of 1891 were not at first sent me, but on my explaining this to the medical officer of health, he gave orders that it should be done; but judging from the lists I have hitherto received, I do not think that the provisions of this clause are carried out in their integrity, either in Birmingham or in the country parts of my district.

"I have been in communition with all the medical officers (eight in number) whose districts touch on mine, but the only places of any importance outside Birmingham are the towns of Warwick and Tamworth, the rest of my district being rural parts with small villages, and as far as they can, they have been anxious to co-operate with me. At Warwick the town council has appointed recently an inspector under the Act and I have furnished him with a list of workshops, and I am assured by the medical officer of health that a register will now be kept but at Tamworth, although the town council nominated an inspector of workshops, owing to certain objections he was not appointed, and the medical officer of health there has no inspector to carry out a regular system of inspection; but I have received, since writing the above, a report from the medical officer of health that he has himself recently inspected the whole of the workshops in both the rural and urban sanitary districts under him, and also that 'since our last interview I 'brought the question of the appointment of an inspector before the 'notice of the urban sanitary committee, but they decided not to make 'any appointment at present.'

"I believe that unless the local authorities of rural parts and small towns can find some person who can combine this duty of workshop inspection with some other small appointments, they will be unwilling to incur the expense necessarily involved for perhaps a very small number of insignificant workshops."

Mr. Prior, H.M. Inspector, Huddersfield, reports :—

"I am very glad to be able to report that the joint work now shared by the medical officers of health and ourselves, in the inspection of workshops, is satisfactorily and harmoniously proceeding. Serious epidemics of smallpox in some districts, and the measures necessary in others for preventing the introduction of the disease and for promptly dealing with it, should it unfortunately break out, have naturally somewhat impeded the action of the local sanitary authorities in dealing with a work new to them, the inspection of workshops. But in Huddersfield and Halifax the sanitary inspectors are now busily engaged in the workshops, our complaints receive prompt attention, and notices of workshops in which protected persons are employed are received by us (H.M. Inspectors). Similar energy is being displayed in some of the smaller districts; and if in a few, from causes which I need not particularize, a similar promptitude has not been displayed, all are now gradually getting into line, and great progress has during the year been made in this branch of the work."

Mr. Hine, H.M. Inspector, Leeds, observes :—

"With respect to the workshop inspection by the sanitary authorities, I am able to report a change for the better since last year. I then said with the exception of Leeds and one or two small places, that I could see no signs of anything being done. Now the work is being taken up

more generally, and I should specially mention Hull, where the work has been begun most energetically. An inspector was specially appointed about six months ago to visit workshops and any factories where sanitary matters required attention, and also to carry out the Shop Hours Act. I believe he is doing some very good work where it was very much wanted, and I receive from him lists of workshops in which women or young persons are found to be employed, and also lists of any workshops which he ascertains have ceased to exist. Hull and Leeds are the only two places where an inspector is specially appointed for this work, but in other smaller places I have found the medical officer himself, or one of his sanitary officers, visits the workshops. In York I have been unable at present to see signs of anything being done. I have twice called upon the medical officer of health who says he has drawn the attention of the corporation to the Act.

"I enclose reports from the inspectors in Leeds and Hull, of the workshops visited.

LEEDS.

Visits to Workshops by Sanitary Inspector for 12 Months ending 28th October 1893.

Inspection of Workshops.

Showing some of conditions of workshops already on the register during the year ended 28th October 1893.

Date.	No. of Visits made to Workshops.	Employés.			Ventilation.		Condition of Premises.				No. of Occupiers noticed for Dirty Premises.
							Rooms.		Closets.		
		Male.	Female.	Total.	Good.	Bad.	Clean.	Dirty.	Clean.	Dirty.	
1892.											
5 weeks December 3 -	35	242	229	471	15	20	32	3	23	12	3
4 weeks December 31	54	506	356	862	40	14	26	28	26	28	28
1893.											
4 weeks January 31 -	87	500	440	940	70	17	77	10	67	20	10
4 weeks February 28	50	497	1,167	1,664	40	10	47	3	40	10	3
5 weeks April 1 -	122	1,113	1,012	2,125	120	2	90	32	86	36	30
4 weeks April 29 -	40	131	209	340	39	1	30	10	30	10	10
5 weeks June 3 -	25	230	171	401	25	—	19	6	15	10	6
4 weeks July 1 -	20	131	330	461	20	—	15	5	13	7	5
4 weeks July 29 -	40	265	297	562	38	2	32	8	26	14	8
5 weeks September 2	40	258	140	398	40	—	31	9	25	15	9
4 weeks September 30	23	200	140	340	21	2	17	6	16	7	6
4 weeks October 28 -	66	361	298	659	59	7	53	14	42	24	14
Totals - -	602	4,434	4,789	9,223	527	75	468	134	409	193	132

Twenty-nine premises were found on inspection to have been closed.

INSPECTION of WORKSHOPS.

Showing the workshops not previously registered, to which visits have been paid, and the sanitary arrangements at time of visit.

Date.	No. of different Workshops visited.	Description of Drainage.				Situation of Closets.			
						Inside.		Outside.	
		Cut off.	Not cut off.	No Drains.	Out of Order.	W.C. Soil Pipe carried up full size.	W.C. Soil Pipe not carried up full size.	W.C.'s.	Privies.
1892. 5 weeks December 3	18	6	8	4	—	2	2	8	6
4 weeks December 31	12	5	7	—	—	5	2	2	3
1893. 4 weeks January 31	7	4	1	2	—	2	—	4	1
4 weeks February 28	12	3	6	3	—	3	2	4	3
5 weeks April 1 -	7	1	3	3	—	2	—	4	1
4 weeks April 29 -	26	9	8	9	—	8	3	12	3
5 weeks June 3 -	—	—	—	—	—	—	—	—	—
4 weeks July 1 -	27	9	9	9	—	7	5	13	2
4 weeks July 29 -	8	8	—	—	—	5	—	2	1
5 weeks September 2	7	2	3	2	—	2	1	3	1
4 weeks September 30	11	6	3	2	—	5	2	3	1
4 weeks October 28 -	19	3	9	7	—	2	3	13	1
Totals - -	154	56	57	41	—	43	20	68	23

In addition to above the inspector has made 62 visits to bakehouses, requiring limewashing in 8, and structural alteration in 1. The district sanitary inspectors have also bakehouses under their care, which visits are not included.

HULL.

WORKSHOP INSPECTION by SANITARY INSPECTOR for about Six Months.

SUMMARY.

Inspections.

No. of Places Inspected.	No. out of Order from Sanitary Defects.	No. put in Order.	No. remaining.
369	174	90	64

NOTIFICATIONS to H.M. INSPECTOR of FACTORIES, and FIRMS added to your* LIST.

Shops where Young Persons or Women were found at Work.	Shops where the Factory Acts Abstract were not exhibited.	Removals, &c.	New shops employing Men only added to your* Register.
72	18	48	38

* The above are extracts from reports to Hull Sanitary Committee, and the word "your" refers to the committee.

13th November 1893. J. A. H.

Table showing Work Completed.

Nature of Defect.	No. of Firms where found.	No. of Firms where amended.	No. of Firms where in progress.	Shops closed by Occupier.	No. remaining to be put in order.	Reported to the Borough Engineer.
Cleansing and limewashing	101	81†	5	4	23	—
Overcrowding	11	8	2	1	2	—
Ventilation or means to carry off fumes.	17	16	—	2	—	—
Deficient or defective sanitary convenience.	82	38	2	—	42	2
Defective drains or urinals	14	9	2	—	5	—
Defective pavements	3	1	1	—	2	—
Absence of water supply	4	1	—	—	1	2
Defective, or absence of manure pits.	4	1	—	—	3	—
Animals kept in an improper place.	1	1	—	—	—	—
Dangerous structures	1	—	—	—	—	1
Roofage in bad repair	1	—	—	—	1	—

† Including several done by request.

Sanitary convenience provided.

Water-closets.			Privies.		
New.	Repaired.	For use in common.	New.	Repaired.	For use in common.
17	2	—	14	4	4

Mr. Robinson, H.M. Inspector, Dundee, remarks :—

"The clauses of the 1891 Act, transferring the workshops, as regards ventilation, sanitary matters, &c., to the local authorities, have now been in force nearly two years, but little or nothing has been done in the way of inspection by the various authorities in this district. For many years, under a private Act, the sanitary inspector of Dundee has had power to inspect and enforce sanitary regulations in workshops in the burgh, and

a list of those thus inspected, which by no means embraces all the workshops in the town, was forwarded to me soon after the Act of 1891 came into force. With this exception, no workshops have been reported to me by the local authorities in any part of my district under section 3 (3) of the 1891 Factory Act.

"The sanitary authorities of Arbroath made an inspection of the workshops of that town, but beyond this I have not found a single instance of any action having been taken by the local authorities to see that the sanitary provisions of the Factory Act are carried out.

"I should mention, however, that although the sanitary department of Aberdeen have taken no steps themselves to ascertain by inspection the sanitary condition of the workshops of that town, I have always found them most anxious and willing to attend to any complaint or defect that I may point out to them, and I consider that the sanitary condition of the workshops in Aberdeen would compare favourably with those of any town in the country."

Mr. Lewis, H.M. Inspector for South Wales, reports :—

"Upon the Factory and Workshop Act, 1891, coming into force I forwarded to the local sanitary authority in the principal towns of my district a list of registered workshops, accompanied by a reference to the duty of the authority to enforce the sanitary provisions of the said Act in regard to workshops, and in many instances I have since furnished the authority with supplemental lists.

"In accordance with section 3 (3) of the aforesaid Act, I have received written notices from a few medical officers, of workshops wherein protected hands are employed, and which were not previously upon my register.

"In towns of Swansea and Cardiff the work of inspection is most thoroughly and systematically done, an additional inspector having been appointed by the anthority in each place to aid in carrying out the new duties imposed by the Act. By the courtesy of the respective medical officers of health I am able to submit herewith a copy of the registers in use, also, in respect to Cardiff, a summary of the visits paid and the work done from Jan. 1st to Sept. 30th, 1893.

"At Swansea, cards have been issued to be affixed in workrooms, stating the number of hands that may be employed during daytime, and the necessary reduction in that number when overtime is being worked.

"The medical officers of health at Aberdare, Merthyr Tydvil, Chepstow, Abergavenny, Pontypool, Llanelly, and Pembroke report to me that the workshops in their respective districts are periodically inspected with satisfactory results.

"In the other towns and populous industrial centres of my district I fear that very little has been done, save attending to the complaints which are being sent to the medical officers from time to time by me and my colleague, H.M. Inspector, Mr. Edwards, of overcrowding and sanitary defects which come under our notice upon our inspectorial visits to workshops."

CARDIFF.

From 1st January 1893 to 30th September 1893.

Nature of Workshop inspected.	Number of Inspections.
Bakehouses	286
Dressmakers	58
Tailors	206
Milliners	28
Waterproof manufacturer	1
Oilskin makers	2
Shoemakers	2
Plumbers	1
Cabinet makers	2
Shipbuilding yards	3
Timber yards	2
Foundries	1
Total	592

Nature of Nuisance.	Bake-house.	Dress-maker and Milliner.	Tailor.	Foundry.	Timber Yard.	Ship-build-ing Yard.
Water-closets cleansed and repaired.	—	3	5	—	—	—
Water-closets supplied with water.	—	1	3	—	—	—
Drains trapped and repaired.	8	2	2	—	—	—
Ventilation provided	—	1	2	—	—	—
Limewashed	12	6	5	—	—	—
Repaired	8	3	4	—	—	—
Overcrowded	—	3	4	—	—	—
Closed	—	—	2	—	—	—
Supplied with chimneys for gas stoves.	—	2	3	—	—	—
Water-closet accommodation provided.	—	1	—	—	—	—
Trough-closets fixed	—	—	—	1	2	3
Totals	28	22	30	1	2	3

"Dear Sir, Swansea, 27th November 1893.

"Enclosed herein is sample of card, which at my suggestion the local authority is having affixed in all the workshops of Swansea.

"Yours obediently,

Aug. Lewis.

"R. E. Sprague Oram, Esq.,
H.M. Chief Inspector of
Factories and Workshops."

This card should be hung in a conspicuous position in the workroom.

FACTORY AND WORKSHOP ACTS.

Register No.________ Name________________________________

Occupation____

No. of persons allowed by day_______________________________

NOTE.—When working overtime, number of persons to be proportionately reduced. Two children under the age of 14 may count as one adult.

[SEE OVER

Date when lime-washed or painted.

____

____

____

____

____

NOTE.—Every workshop must be lime-washed once at least in every 14 months.

CARDIFF.

REGISTER OF WORKSHOPS.

Name and Address of Owner or Agent, and Name of Occupier.	No. on Register.	Description and Position of Workshop.	Method of Ventilation.	Sanitary Accommodation.	Measurement of Workshop.			
					Length.	Width.	Height.	Cubic Feet.

No. of Persons workshop will accommodate during Daytime 250 cubic ft. per head.	No. of Persons workshop will accommodate working Overtime 400 cubic ft. per head.	Date of Inspection.	Remarks.

SWANSEA.

Factory and Workshops Act, 1891.

Register No.	Name of Occupier and Address.	Name of Owner and Address.	Trade carried on.	If Dusty.	Fumes perceptible.	No. of Workrooms.

Dimensions.	Cubic Capacity in feet.	No. of Gas Jets.	No. of Fireplaces or Stoves.	Area of Windows clear of Sash Frames, Sup. Ft.	Area of Ventilators, Sup. Ft.	No. of Doors acting as Ventilators.	Condition of Rooms.	When last Limed.

Government Regulations posted up.	Means of Escape in case of Fire.	Fire Appliances.	No. of Men Employed.	No. of Women Employed.	No. of Girls Employed and Ages.	No. of Boys Employed and Ages.	Water Supply.

Number and kind of Privies.	Separate Accommodation for Se[illegible]	No. of Urinals.	Structural Defects.	Sanitary Requirements.	Dates of Visits.

NOTICES OF WORK REQUIRED, *re* FACTORY AND WORKSHOP ACT, 1890.

Ledger Folio.	Date of Notice.	Notice complied with.	Requirements of Notice.	Situation of Premises.

No. of Workshops Limewashed.	W.C.'s provided.	Occupants Reduced.		Remarks.
		From	To	

Mr. Arnold, H.M. Inspector, Worcester, observes:—

"With the exception of Worcester and Cheltenham, nothing appears to have been done by the local authorities. At Cheltenham, in especial, the local authorities seem to act with great energy, and have had lists of the workshops prepared and they are regularly visited by the local sanitary inspectors; though I do not know that they have issued cards stating the cubical contents of the room, I feel sure they have only to be asked to do so and it will be done, as it is a suggestion which must commend itself to everyone. In most cases, however, all that is done is to visit bakehouses and see that the lime-washing is done, not counting the two towns already mentioned, I have only received one notice from a sanitary authority of a workshop, and that was from Pershore."

Mr. Platt, H.M. Inspector, Burnley, reports:—

" *Co-operation from Medical Officers, &c.*

"BURNLEY.—Dr. Dean has caused an inspection of 142 workshops. One is reported as wanting lime-washing, and nine as having no closet accommodation; but of these nine, one only comes under the Workshops Act.

"NELSON.—Dr. Miller has caused some two or three workrooms to be inspected, and finds no complaint. He considers the workrooms in Nelson so good that a systematic inspection would be wasting time.

"COLNE.—Dr. Lovett, acting medical officer, is going round the workrooms with sanitary officer. No report to hand.

"PADIHAM AND GREAT HARWOOD.—No report. Both medical officers interviewed by me.

"HEBDEN BRIDGE AND MYTHOLMROYD.—Dr. Lawson does not feel called upon to act at all, not having received any instructions from the local authorities.

"COMBINED CRAVEN DISTRICT (Skipton, Haworth, and Fenhope, &c.). *See* medical officer's letter.

"KEIGHLEY.—*See* medical officer's letter.

"TODMORDEN.—Consequent on the passing of the 1891 Act, the local authorities have issued a notice to owners and occupiers of factories, workshops, workplaces, and laundries (Dr. Thorp, medical officer).

"Medical officers of BARNOLDSWICK, JUDDENFOOT, &c., and BINGLEY not been seen or heard from. Bingley medical officer written to.

"Excepting Burnley, I have received no notification of occupation of any workshop from the sanitary authorities. I have sent to the medical officers 72 notices of occupation of workshops."

"Medical Officer of Health's Department,
"Municipal Offices, Keighley,
13th October 1893.

"DEAR SIR,

"I BEG to acknowledge receipt of your letter of 3rd inst. with newspaper paragraph enclosed. I delayed writing you sooner in order that I might make inquiries as to whether anything has been done in this district by the sanitary authority.

"Up to twelve months ago the medical officer of health was also certifying factory surgeon, and if he did anything it was in the latter capacity, as no reference is made to any factory work in the sanitary authorities' books so far as I can find.

"Since my appointment as medical officer of health nothing resembling systematic inspection of workshops has been attempted. Occasionally—for instance, in the case of rag and bone dealers—directions are given regarding cleanliness and lime-washing of workshops, but in every case it has been shops of the smaller order.

"For my own part I have refrained from doing anything which the factory surgeon might consider as trespassing on his province. At the same time I do not wish to overlook any of my duties and would be pleased were you to call attention to anything requiring notice.

"You ask about Ingrow being in my district, great part of it is; the rest being either in Oakworth or Bingley local board.

"Should you have a few minutes to spare any time you are in Keighley I should be very pleased to see you at my house in North Terrace, opposite the Mechanics' Institute.

"Yours sincerely,
"WILLIAM SCATTERTY."

"COMBINED CRAVEN DISTRICT.

"Officer of Health's Department, Settle,
October 5th, 1893.

"DEAR SIR,

"IN reply to your letter I may say, that upon a receipt of a notice from you I have personally examined the premises in my other districts. I have had no application with respect to those you enclose, but have made a note of them. In none of my districts has a special inspector been appointed to carry out the sanitary provisions of the Act, but I presume it will fall under the duties of the inspector of nuisances in each district.

"Believe me,
Yours faithfully,
F. E. ATKINSON."

"A. Platt, Esq.,
"H.M. Inspector of Factories,
"Burnley.

NOTICE.

To Owners and Occupiers of Factories, Workshops, Workplaces and Laundries.

Abstract of certain Provisions of the Factory and Workshop Act, 1891, which came into force on the 1st of January, 1892, which are to be enforced by sanitary authorities.

Workshops.

By this Act all Workshops within the meaning of the Factory and Workshop Act, 1878, are in future to be under the control of the sanitary authority of the District, as regards the regulation of their sanitary condition, and the provisions of the Public Health Act, 1875, now apply to them.

Nuisances.

The result of this alteration of the law, is that any workshop, as well as a workplace, which is :—

(1) Not kept in a cleanly ;

(2) Not ventilated in such a manner as to render harmless, as far as practicable, any gases, dust, or other impurities generated in the course of the work carried on therein that are a nuisance or injurious to health ; or is

(3) So overcrowded while work is carried on as to be dangerous or injurious to the health of those employed therein ;

(4) Which is not kept free from effluvia arising from any drain, water-closet, earth-closet, privy, urinal, or other nuisance ;

is to be deemed to be a nuisance, and may be dealt with as such under the Provisions of the Public Health Act.

Cleansing.

In addition to these provisions it is enacted that, where on the certificate of a medical officer of health, or an inspector of nuisances, it appears to any sanitary authority that the limewashing, cleansing, or purifying of any workshop, or any part therefore is necessary for the health of the persons employed therein, the sanitary authority shall by notice require the work to be done, under a penalty of 10*s.* a day for default.

Power of Entry.

For the purpose of carrying out their duties as to workshops, a sanitary authority and their officers, in addition to their powers under the Public Health Acts, have all such powers of entry, inspection, taking legal proceedings, or otherwise as H.M. Inspectors of Factories possess under Part III of the Factory and Workshop Act, 1878, but without having, as was formerly the case, to obtain the special authority of the Secretary of State. These powers of entry and inspection are such as to enable the sanitary authority and their officers to inspect premises at all times when work is carried on, and at other times under certain circumstances.

Powers of Factory Inspectors as to Sanitary Defects.

Where it appears to an inspector of factories, that any act or default in relation to any drain, water-closet, earth-closet, privy, ashpit, water supply, nuisance, or other matter in a factory, workshop, or laundry, is punishable under the Public Health Acts, he is required to give notice to the sanitary authority, whose duty it will then be to enforce the law, but if they fail within a reasonable time to take action, the inspector may himself take proceedings.

FACTORIES.

Provisions as to safety in case of fire.

In the case of every factory, the construction of which is commenced after 1st January, 1892, and in which more than forty persons are employed, it is now necessary that a certificate shall be obtained from the sanitary authority that such factory is provided, on the storeys above the ground floor, with such means of escape in case of fire, for the persons employed therein, as can reasonably be required under the circumstances of each case.

All factories which were in existence on the 1st January, 1892, and in which more than forty persons are employed, must be provided with such means of escape, and the owner may be required, by notice from the sanitary authority, to carry out all measures necessary for providing the same, by a date to be specified, subject in case of default to a fine of 1*l*. a day.

By Order,
D. SUTCLIFFE,
Clerk to the Sanitary Authority,
Todmorden Local Board.

Mr. Pearson, H.M. Inspector, Rochdale, remarks:—

"In accordance with your instructions of June 30th, 1892, I visited all the medical officers of health in my district and explained the alteration in the law *re* Act, 1891, &c. After which I supplied each with a full list of workshops for their respective districts, and have forwarded, at various times, a list of all that have come under my notice since, so that at the present time they are in possession of the list up to date. This, however, has not been reciprocated, except in two small cases, each consisting of three bakehouses employing one young person each.

"The corporation of Oldham have appointed a special inspector for workshops, but I am not aware of any other town having taken similar steps."

Mr. J. T. Birtwistle, H.M. Inspector, Blackburn, reports:—

"I have received little co-operation from the medical officers and local authorities with respect to workshops, with one exception, that being by far the largest town in my district, Blackburn; here the authorities have appointed an inspector who is under the direct supervision of the medical officer. Periodical visitations are made, the lists of workshops where children, young persons, and women are employed, are regularly supplied to me; a register is kept by the medical officer as to the state, &c., of each workshop, and the Act generally and fully administered.

"In other towns the medical officers have visited a few workshops, principally upon complaint. I have visited the whole of the local authorities, supplied them with a full list of my registered workshops, and am promised that the Act shall be at once fully set in motion."

Mr. Tinker, H.M. Inspector, Bolton, reports:—

"I have received great help and assistance from the medical officers and the local authorities in the different parts of the district, and may say that the corporations of Bolton, Wigan, and Southport have appointed local inspectors, who have registers in which are kept the requisite particulars as to cleanliness, ventilation and overcrowding, and I am pleased to report that I have been supplied with some good and valuable information from the said inspectors."

Mr. Sedgwick, H.M. Inspector, Walsall, observes:—

"In reference to the co-operation of medical officers of health and local authorities with respect to workshops, I have to report that at Walsall, West Bromwich, Smethwick, &c., much has been done by way of carrying out the provisions of the amended Act of 1891. In some of the smaller towns and places there is much apathy on the part of the local authorities. The limited staff employed, is the main impediment to a more thorough carrying out of the Act. I have good reasons to believe that during the coming year improvement will be made in this direction.

"To prevent overcrowding, I am of opinion that occupiers should be compelled by law to state on a proper form, the capacity of the room and the number of persons to be employed therein, especially where the making-up of articles of wearing apparel is carried on."

Mr. Shaw, H.M. Inspector, Manchester, reports:—

"I beg to hand you herewith a copy of the first report made to me by the superintendent of the sanitary department of the Manchester corporation.

"The systematic inspection of workshops has now been commenced, and four inspectors (two men and two women) have recently been appointed for the carrying out of the provisions of the Factory and Workshops Act, 1891, and the Shop Hours Act, and now I hope the inspection of workshops will be systematically carried out.

"A few factories have been visited also, officially, with reference to the provision of escape in case of fire. I am informed, however, that all the large factories in the city will shortly be visited and enquiries made as to whether adequate means of escape are provided.

"I am also informed that the new sewage scheme here is rapidly approaching completion; when this is finished the Sanitary Department will insist on better w.c. arrangements being provided in many factories and workshops, in which at the present time the arrangements are simply abominable.

"From the Manchester Corporation I have received a few notices in accordance with section 3 (3) of 1891 Act, but from other local authorities I have received none whatever. Information as to what steps, if any, have been taken to carry out the provisions of the Factory and Workshops Act, 1891, has been requested by me from each of the medical officers of health in my district, and from the replies received at the time of my writing this report very little appears to have been done, and that only in Warrington as far as regards the inspection of the dressmaking and millinery establishments in that town.

CITY OF MANCHESTER.

Workshop and Shop Hours Acts.

The Superintendent submits the following Statement of the Work done by the Inspectors under such Acts, from 18th September to 4th November 1893.

Inspector.	Shops.				Workshops.						Bakehouses.				
	Number Visited.	Number of Copies of "Abstract of Act" distributed.	Number newly Registered.	Total Number on Register.	Number Visited.	Number of Lists for Out-workers and Contractors distributed.	Number of Premises in which the Sanitary Arrangements were found defective and now being dealt with.	Number of Reports referred to Factory Inspector.	Number newly Registered.	Total Number on Register.	Number Visited.	Number of Premises in which the Sanitary Arrangements were found defective and now being dealt with.	Number of Reports referred to Factory Inspector.	Number newly Registered.	Total Number on Register.
ROBERTS - -	1,103	502	—	502	110	79	18	10	—	101					
ROWE - -	1,172	512	—	512	141	118	50	2	—	124					
COPPOCK - -															
TATTERSALL -															
Totals -	2,275	1,014	—	1,014	251	197	68	12	—	225	—	—	—	—	353

NUMBER OF REPORTS FOR OFFENCES UNDER THE ACTS.

Inspector.	Shops.			Workshops.							Bakehouses.										Grand Total.
	Employing a Young Person for a longer Period than 74 Hours (including Meal-times) in any One Week.	Not exhibiting in a conspicuous Place in a Shop a Copy of Abstract of the Act stating the Hours during which a Young Person may lawfully be Employed.	Obstructing the Inspector in the Execution of his Duty.	Not kept in a Cleanly State.	Not properly Ventilated.	Overcrowded.	Not kept free from Effluvia arising from any Drain, Water-closet, Earth-closet, Privy, or Urinal, or other Nuisance.	In which Lime-washing, Cleansing, or Purifying is necessary.	Obstructing the Inspector in the execution of his Duty.	Without or insufficiently supplied with Closet Accommodation.	Where any Water-closet, Earth-closet, Privy, or Ash-pit is within or communicates directly therewith.	Where the Cistern for supplying Water to Bakehouse is not separate and distinct from the Cistern supplying Water to a Water-closet.	Where any Drain or Pipe for carrying off Fœcal or Sewage Matter has an opening within.	In such a State as to be on Sanitary Grounds unfit for Use or Occupation.	Which are not kept in a Cleanly State, and free from Effluvia arising from any Drain, Water-closet, Earth-closet, Privy, Urinal, or other Nuisance.	Overcrowded.	Not properly Ventilated.	In which Limewashing is necessary.	Where Sleeping Place is in contravention of Factory and Workshop Act, 1878, Section 35.	Without or insufficiently supplied with Closet Accommodation.	
ROBERTS	32	6	1	6	—	—	1	5	—	6	—	—	—	—	—	—	—	—	—	—	57
ROWE	14	1	—	3	1	—	13	22	—	11	—	—	—	—	—	—	—	—	—	—	65
COPPOCK																					
TATTERSALL																					
TOTALS	46	7	1	9	1	—	14	27	—	17	—	—	—	—	—	—	—	—	—	—	122

The Shop Hours Sub-Committee.

Superintendent.

CITY OF MANCHESTER.

Northern District.

Register of Workshops.

Factory and Workshops Act, 1879 to 1891.

Name of Owner.	Situation or Workshop.	Purpose for which used.	Date of Inspection.	No. of out-workers employed.	What defects found to exist.	What Action taken.

Mr. J. H. Walmsley, H.M. Inspector for the Pottery Districts, reports :—

"With a few exceptions, little has been done by the local authorities in this district to carry out the provisions of the Factory Act of 1891, respecting workshops. This lukewarmness may arise from the impression that it is optional whether they carry out the provisions of the Act or not.

"It is, however, gratifying to find that the county borough of Hanley took immediate steps, so soon as the Act came into force, to carry out the regulations vigorously. John Clare, Esq., medical officer of health, has been very energetic; and I append a copy of his annual report for 1892.

"*Factory and Workshops Act*, 1891.—Under this important Act, the carrying out of the provisions as to cleanliness, ventilation, overcrowding and limewashing of workshops, was transferred from the inspector of factories to the local sanitary authorities.

"The Act came into operation on January 12th, and I am pleased to state that in Hanley, at any rate, it has not been a dead letter. The Corporation engaged an additional inspector, Mr. Steward, whose chief duties were to inspect workshops, and make smoke observations.

"The number of workshops inspected is 358.

121 notices were served to limewash and clean.
8 to abate overcrowding.
57 to provide proper water-closet accommodation.
19 to provide efficient ventilation.
18 to remedy defective drains.
98 to remedy various nuisances.

"*These notices have all been complied with.*

"*Bakehouses.*—There are in Hanley, 78 bakehouses. These have all been visited by myself and the inspector, and in *forty of* them, notices have been served to remedy existing defects. All of these notices either have been or are in process of being complied with.

"*Shop Hours Act.*—An important Act for regulating the employment of young persons in shops, was passed June 28th, 1892. As the Act provides that the council of a county or borough may appoint what inspectors they think necessary, to enforce the provisions of the Act,

the Council have appointed an inspector under the Act. Up to the present, 367 shops have seen visited, and particulars of each visit entered in a register. In 100 of the shops visited, young persons are employed. Nine shopkeepers who had committed offences against the Act were cautioned, and forthwith made arrangements for complying with its provisions."

Mr. D. Walmsley, H.M. Inspector, Stockport, observes:—

"I have met with a ready co-operation from the medical officers of health throughout the district, in seeing that all sanitary defects in workshops were speedily remedied when notices had been sent to them on the prescribed forms. I have forwarded eighteen such notices during the year, chiefly referring to overcrowding, defective closets, want of ventilation, and want of limewashing; in all these cases I have found the defect has been remedied with all possible speed.

"While testifying to their prompt assistance I regret there does not appear to have been that thorough systematic inspection of workshops by the local authorities as would appear necessary, and with the exception of Stockport (where a few additional names of occupiers of workshops have been sent me), not a single report has reached me where a workshop has been visited where women, young persons and children have been found employed, and where no Abstract of the Factory and Workshop Act was affixed. This is a matter of regret, as doubtless numerous workshops could be registered and visited by H.M. Inspector if the various medical officers directed systematic visiting in their various districts, and reported all reportable cases.

"The order concerning lists of outworkers being kept by occupiers, in certain trades has had beneficial results; numerous workshops have come under inspection by this means, and these have often been workshops which have most needed inspection."

Mr. Ashworth, H.M. Inspector, Ashton-under-Lyne, remarks:—

"Nothing is being done by the local authorities in my district respecting the inspection of workshops, except in Marple, where there are very few workshops. My relations with the several medical officers of health are very cordial, and they give early attention to anything that I may point out, but I do not hear that either they or any of their officers visit on their own account to see that all may be satisfactory.

"From the above you will therefore be prepared to hear that registers of workshops are not kept by the local authorities with the particulars mentioned.

"No special inspectors have been appointed by the local authorities to carry out the sanitary provisions of the Act; and there are not any cards hanging up in the workshops showing the number of workpeople that may be employed in them.

"After an interview with the medical officer of health for Marple, he sent me a list of all the workshops he knew, this is the only notice I have ever received in accordance with section 3 (3) Factory Act, 1891."

Mr. Richard Johnson, H.M. Inspector, Newcastle-on-Tyne, observes:—

"I regret to report that with the single exception of one town, where the medical officer is also the C.S., I have not received a single notice under sub-section (3) section 3 of 1891. I have however

after repeated efforts induced the sanitary authorities of Middlesbrough and of Newcastle-on-Tyne to make a move, the former I believe on the most approved plans, the latter, I fear, in a perfunctory manner, as the town clerk is of opinion that it is simply an attempt to foist on local authorities duties and expenses that should be borne by the Imperial Exchequer."

VII.—Outworkers.

The section of the Act of 1891 only requires those who have factories or workshops to keep lists of outworkers, so that a merchant in the city who employs one man as a cutter and delivers cloth to two or three outworkers has to keep a list; his neighbour who only gives out the cloth, but employs a large number of outworkers need, under the existing law, keep no lists. All merchants should be placed in the same position, and all places from which any work of making up apparel for sale is given out should be required to keep the list of outworkers.

If these lists were sent by the merchant to the medical officer of health for the district, the clerks employed by the local authority could extract from the lists those outworkers who resided in another district. This arrangement would entail much less time and trouble than the collection of the lists by the sanitary inspectors, and these lists could be open for the examination of Her Majesty's Inspectors of Factories, and be returned annually to the merchant for necessary amendment.

VIII.—Overtime.

Attention was called, in my last Annual Report, by various of Her Majesty's Inspectors, to excessive overtime *during the week*. A young person 13 years of age can be employed until 10 o'clock in the evening for five days in a week, during the busy season, and apprentices, without additional remuneration, whilst their fathers are agitating for an eight hours bill. If the number of days in the year is retained it will, I think, be generally admitted that overtime should be restricted to three days per week, and whether young persons and apprentices should be compelled to work after 9 p.m. is worthy of consideration.

Quoting a question of the presidential address of the late Trades Congress, "What mean those parcels of work carried home every night, and in again every morning?" If women and young persons have been employed in the factory workshop during the day I submit that it is an evasion of the Acts for employers to give the goods to be finished at home in a room much less fitted for the work to be done, and that in any amending act a clause should be inserted that no work shall be taken home by any employée engaged in a factory or workroom.

All reforms under the Factory Act have been gradual, and I believe that overtime will eventually be considerably curtailed by the demand of popular opinion. The Sheffield Trades Council passed a resolution that it should be abolished.

I have received the following reports from some of H.M. Inspectors on the subject:—

Mr. Cramp, H.M. Superintending Inspector, remarks:—

"As to the question of *Overtime*, further experience only tends to confirm me in my opinion, long ago expressed, that, with the exception of that for saving perishable articles, it might all be done away with, without detriment to anybody, and with a vast amount of benefit to the women and young persons who have to work it. Could a secret ballot be taken of all the workers affected by the overtime clauses of the Factory and Workshop Acts, I am convinced that very few would be found voting for its continuance."

Mr. Blenkinsopp, H.M. Inspector, observes:—

"I referred before to the question of overtime. Until lately the boot and shoe manufacturers, as a body, had not discovered that they might work overtime, and I kept the fact most strictly dark. One or two asked the question, and, on my explaining the matter, provided themselves with the proper notices, registers, &c. Soon others rushed in and began overtime, mostly without notice. Those who gave notice did not do so in the proper manner, but merely stated that they had begun to work overtime, and I had a great deal of trouble. No registers were kept, *children* were employed late at night and so on. I said, above, that I kept the question of overtime as dark as possible. I did so because I do not approve of overtime. Certain parties that really do depend on seasons and weather, such as the straw hat trade, may require a certain amount of overtime, but as to boots and shoes, people wear them all the year round, the fashion and shape do not change at a moment's notice, nor does the season stop because there is a little bad weather, as is often the case with straw hats. Why, then, allow overtime? The result of overtime is essentially injurious, there is a great push for a time, people work long hours, often too long hours; then all is over for a time, the workpeople have made money *and spent it*, over production is encouraged, and the rest of the year there is nothing, comparatively speaking, to do; manufacturers grumble at bad trade, parents say they cannot afford to send their children to school, and there is general disorganization. Overtime should not be allowed, except in those rare cases in which it may be absolutely necessary. The number of overtime notices sent to me in the 12 months ending 31st October was 3,080, of which 722 came from Luton and 457 from Peterborough. Large as is the number from Luton, it cannot fully represent the overtime worked there. Seeing that there are fully 600 factories and workshops in the hat trade, most of which work overtime, more or less, and that the season was an active and prolonged one, it is evident that a good deal of overtime there was not reported."

Mr. Johnston, H.M. Deputy Superintending Inspector writes as follows:—

"*Overtime.*—The arguments which are now being advanced in favour of an eight hours working day suggests the enquiry whether the large amount of overtime made by women and young persons under the sanction of the law, is either necessary or desirable?

"In my opinion it is, to a great extent, neither the one nor the other.

"It is not necessary, for in a large proportion of cases in so called season trades, advantage is simply taken of the concession by certain

firms to monopolise a larger share of work than they are warranted by their plant in undertaking, or by customers in unnecessarily delaying their orders knowing that overtime will come to their rescue.

"It is not desirable for, in many cases (that of milliners and dressmakers especially) the long hours (14 hours per day) are most prejudicial to the health of the employees.

"I am consequently anxious to see a revision of the whole question of these privileges."

Mr. Bignold, H.M. Inspector, remarks :—

"*Overtime Work* of young persons between 13 and 18. Nothing ha been done to check this pernicious system, by which young persons can be kept at work from 8 a.m. till 10 p.m. on 48 days in the year (less two hours for meals and rest) and too often in overcrowded and insanitary workrooms. This practice largely prevails in the wearing apparel industries in the eastern counties; its evil effects are, (1) the physical and moral deterioration of the young persons so employed, and (2) an increased number of *unemployed* persons; which want of work inevitably results from the overwork of others.

"On this subject, I desire to refer to the evidence and statistics which I submitted to Mr. Mundella and the Labour Commission in December 1891 (*see* Blue Book) and I would also observe that the resolutions of the Berlin Conference, in March 1890, prohibiting all night work of girls, remain a dead letter so far as this country is concerned."

Mr. Bowling, H.M Inspector, remarks :—

"I can add little to what I wrote in my last year's annual report on the subject of overtime. I consider the present state of the law with regard to overtime as nothing short of a public scandal. I have never talked with any 'operative' who approved of it to the extent to which it is at present allowed, especially in the case of articles of wearing apparel, or who would not restrict overtime for young persons within the narrowest possible limits. The following extracts from a letter I received only a fortnight ago express the general feeling on this question.

" 'Dear Sir,

" 'Not knowing the name of the officer in Portsmouth to whom I could make these facts known, I write to you as superintendent of the district. Briefly to state the facts :

" 'It is within the knowledge of many persons that a *system of sweating* exists in the dressmaking establishments of Southsea (special reference was here made to one particular firm among many others) where the girls have to be in their workroom at half-past eight in the morning, and are there kept till 9.15, 9.30 and 9.45 at night. I consider it to be a disgrace and a scandal, and I look to you to send an inspector there and put an end to such infamous conduct. It is not that it is once a week, sometimes three or four times.'

"I made a special enquiry myself into this matter, and found as I expected, that the overtime actually made fell far short of that allowed by law.

"My correspondent gave me his name and address, and I had with feelings of shame to write and tell him that under the so-called law for the protection of women and young persons, the employers he complained of could have legally exacted a great deal more work from these poor girls, and that I was powerless to interfere, except in the way of raising my voice against the iniquity."

Mr. Cooke Taylor, H.M. Inspector, observes :—

"*Overtime.*—The staple industries of this district—shoemaking ribbon weaving, watch making, and cycle manufacture, have been so depressed of late that little or no overtime has been worked. So far as I can judge of the opinion of operatives in general, overtime (for protected persons) is out of favour in all industries; but the preponderance of opinion among manufacturers is for it."

Mr. Jones, H.M. Inspector, remarks :—

"The modifications of the Act intended to meet cases of mourning orders and season pressure is generally taken advantage of, and hands are kept beyond the prescribed time on the slightest pretence.

"I should suggest that these overtime modifications be curtailed if not, in many instances, repealed: feeling, as I do, that the alteration would not have any injurious effect on trade and would be a distinct boon to the workers. If abolished there would be less slack time, and more hands would have regular employment.

"I seldom hear of any women or young persons in the dressmaking, tailoring, or millinery branches who of their own accord or free will, would remain after the usual hours of work. The overtime slips forwarded to me, prove that the few avail themselves of the privilege, showing that the concession is not required nor demanded by the majority in the trade.

"I would venture to recommend that overtime should only be granted to all persons employed in the manufacture of perishable articles of food only for certain specified periods, and that if further modifications were allowed only women and male young persons of 16 and upwards should be kept beyond the legal hours of work, and only in factories and workshops where the proprietor could produce a certified license.

"Does it seem reasonable that women and young persons are required, with the sanction of the law, to work 14 hours, when men are demanding eight hours as the limit for their day's work."

Mr. Cameron, H.M. Inspector, observes :—

"In connection with overtime, I think that very often the occupiers and managers of works object to it while they take advantage of the privilege. They naturally recognise that after a spurt comes reaction and that late hours tell against good work the next day. At the same time, their feeling is that emergencies must be met, and on this account the privilege is valued. I do not think that, as a rule, the operatives object; of course, a thoughtful minority recognise the accompanying evils of overtime, but the majority welcome its additional payments. In certain industries, where proper regulations are observed, I should feel reluctant to withdraw from the occupiers their present power to meet a sudden demand, or from the workers their opportunity to earn increased wages, but there is undoubted difficulty where, as in certain classes of workrooms, the pecuniary advantage to the worker is far from being commensurate. On the other hand, and if the overtime privilege be continued, I venture to regard the distinction, practically drawn between certain trades, as being somewhat arbitrary."

Captain Kindersley, H.M. Inspector, remarks :—

"With regard to the question of 'overtime,' I am sure that it is quite impossible to forbid it altogether.

"In the case of a large mourning order suddenly given to a drapery or dressmaking establishment, for instance, it is clearly absolutely indispensable.

"But, as is well known in the commercial world, the tendency in *all* trades nowadays is to postpone orders till the last moment and then 'wire.'

"Manufacturers dislike overtime and would never have recourse to it if they could possibly avoid it, as it, of course, means extra expense in wages, fuel, and lighting.

"But with home and foreign competition, especially the latter, becoming keener year by year, very few manufacturers can afford to refuse an order through lack of time for its execution within the ordinary hours of work.

"As to the operatives themselves, I think that in all trades both men and women are willing enough to work overtime occasionally, provided the pecuniary inducement is in their eyes sufficient.

"It is simply a question of *£ s. d.* with them as with their employers.

"This being so, of course, the illegal employment of women and young persons, especially the former, is very apt to occur in cases of hurried orders in those trades where overtime is not allowed by the special exceptions of the Act.

"Why women and young persons are allowed to work overtime in nearly every non-textile trade and in workshops, and yet are debarred from doing so in the textile trades passeth all understanding.

"But as long as the present curious distinction continues to exist in the legislative treatment of textile and non-textile operatives respectively, so long will there be occasional infringement of the legal hours when a textile manufacturer is in a hurry and his female operatives are willing to earn a little extra money.

"But, in the meantime, the only effectual way of putting a stop to this is to make it the duty of the superintendent of police in each town to inform the inspector of factories if he knows of any employer infringing the Act by illegally employing women or young persons at night, or during the meal hours.

"No persons are better informed on these points than the local police, and a trifling addition to their daily pay would quite compensate them for this slight addition to their ordinary duties.

"And, not only would this plan be the most effectual check on illegal employment but it would be a considerable saving to the public purse.

"For if the hours of the operatives were under police supervision the number of factory inspectors instead of being increased, could by degrees be soon reduced, while the restrictive regulations of the Act with regard to hours of employment would be administered with greater efficiency than ever."

Mr. Richmond, H.M. Inspector, reports:—

"I have received, during the year ending 31st October 1893, 3,555 notices of overtime from 281 occupiers. Several complaints have reached me of dressmakers being obliged to work overtime without any extra remuneration whatever. This practice, not at all uncommon, is, I take it, an abuse of the spirit of the Act, though not of the letter. The privilege of working overtime is, I consider, also systematically abused in another way. Under Schedule III. 3 (3) permission to work overtime is granted to workshops where the making up of articles of wearing apparel is carried on, on the plea of '*sudden press of orders*

arising from unforeseen events.' Whereas in many dressmakers' and milliners' shops, especially the latter, the privilege of overtime is made use of on every Saturday night, simply because the shops are kept open late, and the workroom hands are consequently required to remain in case of need; overtime in my opinion should be restricted to cases of absolute need, if not abolished altogether. *'Press of work arising at certain recurring seasons of the year'* should, with good management, always be able to be provided for without overtime; and the use, or rather abuse, of the privilege simply to assist in keeping shops open to a late hour, ought not to be tolerated.

"In connection with "overtime" I should wish to draw attention to another abuse which is very prevalent. It is a regular practice at millinery and dressmaking shops, more especially on Saturday nights, for women who have worked their full $10\frac{1}{2}$ hours in the workroom, to be brought into the shop to serve till 10, 11, and even 12 at night. This means for them, in addition to their legal 48 days of overtime, an extra 52 days of, it may be, even later hours. To obviate this abuse the Shop Hours Regulation Act, section 3 (2) should be amended so as to apply to women as well as young persons. I enclose a report of a prosecution instituted by me this year, which illustrates the extent to which serving in a shop, after being employed in a workshop, is abused.

"'To day, at Dale Street, before Mr. Stewart, Clara Tydd, confectioner, 67, Lime Street, was summoned at the instance of Mr. H. S. Richmond, inspector of factories, upon two charges—firstly, neglect to comply with the Factory Acts as to holidays, and secondly, employment of an assistant on Christmas Day. The evidence showed that a child named Julia Harris, 13 years of age, was apprenticed to the confectionery trade, and was employed partly in the bakehouse and partly in the shop. She was thus employed early and late on every day of the week, including Sunday. No half-holiday was allowed during the week in accordance with the Act, and she had been at work as usual on Christmas Day, Good Friday, Easter Sunday, and Easter Monday; and on almost every Sunday during the year. Mr. Stewart characterised the case as an exceedingly bad one, and imposed a fine of 40*s.* and costs on the first charge, and on the second a fine of 20*s.* and costs—in all 3*l.* 13*s.* Mr. Richmond said the case was typical of a number of others which they were determined to put an end to.'"

Mr. Woodgate, H.M. Inspector, observes:—

"With regard to the question of overtime, I have been making special enquiries in the different parts of this district, both among employers and workers. I find many employers are much opposed to any overtime. In some cases I find the workers like overtime, as they get increased remuneration for working after hours, while other workers would like to see overtime altogether abolished. At present overtime is allowed to 10 p.m. for 48 days in the year, in places where wearing apparel is made. As far as this district is concerned, I am of opinion, if overtime were abolished, and the limit of work to 8 p.m. on five days a week, and to 4 p.m. on the weekly half-day, the loss would not be seriously felt except in a few remote cases.

"I would strongly advocate that overtime be still allowed in perishable trades, such as butter and cream factories, jam making, and fish curing."

Captain Smith, R.N., H.M. Inspector, observes :—

"As regards overtime I can only repeat my sincere desire to see all overtime, except to preserve perishable food, abolished. Young women and girls aged 13 now work 14 hours (less meal times) on 48 days in the year. Many of them do not even get wages. That their health suffers I have little doubt, and the only excuse is a coming fashionable assembly or a funeral; the latter excuse is perhaps worthy of consideration, but the answer is found when one points out that more hands could be employed, or the order subdivided so that it could be executed in legal hours. I secured a conviction a few days ago against a fashionable dressmaker who considered that a mourning order justified her in having kept two girls at work for 34 *consecutive* hours, allowing them 1½ hours only for rest.

Federated Trades Council, Sheffield.

"DEAR SIR, 14th November 1893.

"I HAVE pleasure in conveying copy of a resolution passed by our council on the 10th instant, viz.:—That this council is of opinion that women and young persons ought not to be allowed to work overtime, and that the maximum hours worked should be 48 per week, and not 56½ as specified in the Act.

"I am, &c.,

"Captain Hamilton Smith, STUART UTTLEY,
"H.M. Inspector of Factories. Secretary."

Mr. Knyvett, H.M. Inspector, remarks :—

"I wish to express, after an additional year's experience, my appreciation of the very great advantage to the working of the Act conferred by two of the clauses of the Act of 1891.

"I refer to the extension to workshop occupiers of the necessity of sending opening notices when occupying fresh premises, and to the provision which requires notices of overtime to be despatched before the overtime is made.

"A practical illustration of this value is afforded by the fact, that while in former years I hardly received an opening notice of any sort, I have registered during the past 18 months 389 notices of fresh occupances, and have, consequently, acquired increased inspecting power to that extent ; and, in regard to overtime, my total of notices for the past year is 2,332, as compared with the total of 470 in 1883, and this total, moreover, has been reached in a year of notoriously bad trade."

Major Roe, H.M. Inspector, observes :—

"I have made special inquiries from many employers and their workpeople as to their ideas on the subject of overtime of women and young persons in the trades where this privilege is now allowed by law, and I find opinions are varied; but naturally employers express themselves as unwilling to part with such a privilege, even when they never have had occasion to avail themselves of it. Some letterpress printers say that their trade being one liable, not only to sudden calls, but to periodical increases, they could not carry on their businesses without the power of working overtime, whilst others say they never require it, not having such fluctuating businesses. To take one case, that of almanack making, if this were spread over the whole year instead of the printing being done during the last three months of the year, it would entirely revolutionize the trade. Capital would have to be expended months earlier, artists would be behindhand, and so on.

"I am informed also that in bad seasons of trade, warehouses become fully stocked, but that on a revival of trade they would require the warehouse hands to work overtime to get the articles out.

"With reference to the employed, from what I have gathered, they also like the privilege enabling them to earn extra wages occasionally, but some women have told me they do not care to work overtime, thinking twelve hours are long enough, still there are few, I believe, who do not value the opportunities of occasionally earning extra wages by overtime."

Mr. Prior, H.M. Inspector, observes :—

"The number of overtime notices received in 1893 is already largely in excess of those which I have received in any previous year.

"I sometimes hear expressed by woollen and worsted manufacturers, a desire for an extension of the overtime exception to knotters, burlers, and menders employed in their works; but I always inform them that a change in the law would be necessary to enable the Secretary of State to authorise such overtime in textile factories. I have heard no desire expressed for any other extension of the overtime exception. The feeling of the operatives, as far as I can ascertain it, is opposed to any extension of overtime; and it is generally held that the existing overtime exceptions might be modified, and some of them withdrawn with advantage, as they are occasionally unnecessarily used to the detriment of the health of the persons who work overtime, and to the impoverishment of those who through slackness of trade, are unemployed. It is strongly desired by the operatives that no further extension of the overtime exception should be made in compliance with the requests of employers, until the views of the workpeople affected by the proposed change, not of those employed by a few firms only but of the trade generally, have been ascertained, and their wishes communicated to the Secretary of State."

Mr. Hine, H.M. Inspector, remarks :—

"The special exception under section 53, for an additional two hours overtime, is taken advantage of in my district by the occupiers of a great many factories and workshops, more especially in the clothing, dressmaking and lithographic trades, but few avail themselves of th full 48 days in the year allowed to be worked. From inquiries I have made, I find that manufacturers would experience great difficulty in getting their orders completed at certain times if this overtime were disallowed, and that the workpeople do not appear to object to it when it is not too frequent. It seems to me that it would be a step in the right direction if the number of days on which overtime might be worked were reduced from 48 to 24. I think by careful management this might be sufficient to meet all cases of emergency."

Mr. Robinson, H.M. Inspector, reports :—

"One of the most important subjects connected with the administration of the Factory Act is the question of overtime. I noticed in your annual report for last year that some of my colleagues had written strongly against it, and I readily concur in what they said about it. I believe there would be a greater outcry on the part of the public against overtime if it were more generally known that overtime, extending the working day for women and young persons of both sexes to a period of 14 hours, was legal and sanctioned by the Factory Act in many industries. That it is not generally known is shown by the fact that

most of the complaints as to long hours and overwork received by an inspector do not allege employment beyond the hours authorised, with overtime, by the Act. I have found throughout my district that, on the whole, the workpeople themselves object to overtime.

"In the dressmaking and millinery trades I find it almost universally condemned by the workers. Occupiers, with whom I have spoken on the subject, have expressed their dislike to overtime, but have stated that they find it sometimes necessary.

"In some cases, especially in the manufacture of perishable articles, this may be so, but the fact that so many occupiers do without it altogether seems to show that in many industries it might be entirely dispensed with."

Mr. Lewis, H.M. Inspector, observes:—

"I have received 1,877 notices of overtime, being a slight increase over the number received the previous year. With very few exceptions, these notices apply to female hands, 13 years of age and upwards, employed in dress and mantle, millinery, and tailoring workrooms; and large as the number may appear, it certainly is not a full and complete record, as there can be no doubt that much overtime is made during the year whereof notice is not sent to the inspector of the district. In some instances, this may be attributed to the ignorance of occupiers, and in others, to negligence, but there is reason to fear that very many occupiers deliberately refrain from forwarding notice with the object of concealing the overtime from the inspector, and of exceeding, not only the two hours per night, but also the 48 occasions in the year allowed by law.

In the face of the prevailing abuse of this concession, one would be tempted to recommend its total abolition but for the inconvenience such a step would entail upon those employers who faithfully observe the conditions attached to overtime working, resorting to it only upon sudden emergencies, and who, in a spirit of 'give and take,' grant their workers many privileges, such as a holiday week or two during the year in addition to the recognised public holidays, and a weekly short day ending at 1.0 p.m. or 2.0 p.m., instead of at 4.0. p.m.

"The hands employed in the wearing apparel trades are a most helpless and invertebrate class of workers. They have no kind of organisation, and are therefore easy prey to the greedy and unscrupulous employer. For the same reason they dread giving information to the factory inspector, or assisting him to bring their employer 'to book.'

"It should also be borne in mind that the large majority of these workers receive no extra pay for overtime; they would, therefore, most naturally hail with delight its total abolition. On the other hand, it is strongly contended by employers that the concession, as it at present exists, is absolutely necessary to meet the demands of sudden wedding and mourning orders.

"Reference to the annual return of prosecutions will show that 17 cases relating to the employment during illegal hours of women and female young persons, were heard before different benches of magistrates in my district during the year.

"In dismissing this important subject I would venture to suggest that if, after serious consideration, the total abolition of legalised overtime is found to be really impracticable, it should be restricted to *one hour* per night, and not more than *three nights* in any one week, and that it apply to no female under *eighteen years of age*."

Mr. Arnold, H.M. Inspector, observes:—

"For my part I have always wished to see this special exception revoked, excepting of course as regards perishable articles. In the first place it seems to me rather unfair to allow it to some trades and not to others, and the very ones that use it most, *i.e.*, tailors, dressmakers, &c., and letterpress printers, are those I would take it away from first, as I believe work to be carried on under worse conditions in these trades than in any others, and especially so in the very large towns.

Mr. Tinker, H.M. Inspector, observes:—

"Although I have received 1,449 notices of overtime having been worked during the year, or 183 more than last year, I venture to say say that I am in favour of the abolition of the 'overtime clauses' except to preserve perishable food. The operatives in this district are much opposed to overtime work of any kind, and I have heard of no action being taken by the employers in favour of such work in any branch of trade. The notices that I receive are almost entirely sent from dressmakers, milliners, tailors, and printers. I have known cases in the dressmaking trade of learners or improvers receiving no wages for such overtime."

Mr. D. Walmsley, H.M. Inspector, remarks:—

"Section 14 of the Act of 1891 is a lever in the hands of H.M. Inspector, to detect and suppress illegal overtime to a greater extent than formerly, and by this section I believe a large amount of illegal overtime has been prevented during the first three months of the present year, I only received about eight overtime notices from a neighbouring town of Stockport.

"In visiting after hours one evening I detected several firms working overtime without the overtime being recorded, prosecutions followed and during the following month about 200 overtime forms were sent from the same town; had it not been for the above section, the irregularities could not have been as promptly dealt with.

"Although it appears necessary in certain trades at recurring periods of the year to resort to overtime, still it appears to me, from conversations I have held with the operatives, that the majority (and especially females), are not favourable to overtime, and would in numerous cases object to it, were it not for the desire to cope with the temporary pressure of business."

Mr. Ashworth, H.M. Inspector, observes:—

"With respect to overtime in those trades where overtime is legal, I can say, I think without exception, that the *manufacturers* wish the privilege to be continued, they say that they find it so convenient when there is a push on, or where an order is incomplete and has to be finished by a certain time.

"From the *operatives'* point of view, they are between two fires; in the first place they certainly do not like to work extra time, but in the second place they *do* like the extra money they obtain for working this overtime, so taking the money question into consideration, I should say that they, too, are decidedly in favour of working overtime. In dressmaking where it is not customary to pay for any extra time, the girls either receiving no wages at all for some time while they are learning, or being paid a standing weekly wage, and so getting a certain sum whatever the time that may be worked in the workroom, the workers

are very much against the working of overtime. In certain seasons of the year, which are termed the 'busy season,' a large amount of overtime is worked, and I am of opinion that a great deal of injury is done to the health of the females; and at the end of this 'busy season,' they are thoroughly prostrate, and both mistresses and workers are glad when it is over. If overtime is necessary, I think it might be limited to *women* only, girls under 18, I do not think, ought to be permitted to work such long hours.

"The greater publicity which has now to be given to this overtime, by the affixing the 'record of overtime' in the workroom, and the requirement that 'notices' must be sent off before 8 p.m. of the evening on which overtime is worked, is having a very good effect. A much larger number of notices are sent off (I have received 1,048 notices since I took charge of this district), in consequence of the better check that can now be kept on the overtime worked."

Mr. Dodgson, H.M. Inspector, remarks:—

"The provisions of the Factory Acts with regard to overtime, in my humble opinion, lead to more evasions of the law than any other single class of provisions, and, what is worse, most of these evasions are never discovered. The worst offenders in this respect are occupiers of workshops in the various branches of the clothing trade. Such workshops' from the scant air space at present demanded, are undesirable places for day labour; whilst at night, over heated and suffocating, they are not fit places for women, and more especially young persons, to work in, after a previous 12 hours spent therein. Occupiers are two only willing to avail themselves to the uttermost of the special exception granted them. Improvers and apprentices dare not complain, and women are only induced to remain for the little extra remuneration given them for overtime. A third class whose interest should be regarded is the parents of young persons so engaged. I have heard several parents complain bitterly about excessive hours their offspring, occasionally, are called upon to labour. To my mind the whole of the special exceptions relating to overtime ought to be wiped from the statute, with the sole exception of overtime for perishable articles, and overtime be made illegal to all protected persons. Or that under more stringent provisions overtime should only be legal for women, and be made a very serious offence for young persons under 18 years of age."

Mr. Edwards, H.M. Inspector, who is attached to the South Wales District, remarks:—

"As the result of considerable experience gained previous to entering the service, and close observation since, with regard to the working of the provision of the Factory Act as regards overtime in provincial workshops, where wearing apparel is made up, I venture to make the following suggestions and also my reasons for doing so:—

(1.) That overtime with regard to young persons should be absolutely abolished.

(2.) That the maximum number of occasions when overtime can be worked should be reduced to—not more than upon 36 occasions in the year and not more than upon three occasions in the one week.

(3.) That when the occupier avails or intends to avail himself of the overtime clauses, the work in that workshop shall cease at 2 p.m. on Saturday or the day substituted for Saturday.

"I suggest the abolition of overtime with regard to young persons because all persons under the age of 18 years have not generally attained their maturity, and are not therefore able to bear the strain entailed in an extra two hours' work without detrimental effects.

"Undoubtedly overtime is an evil and, naturally, more or less detrimental to all, but there are certain traces of good in its train that I do not feel disposed to advocate its abolition with regard to all because, (except in cases of mourning orders, it is at certain recurring periods of the year *i.e.*, the summer and the winter seasons that overtime becomes necessary; at other times *i.e.*, between the seasons the employees in dressmaking, etc., workshops have scarcely enough to do, and I know that it is often a kindness upon the part of an employer not to discharge them at such times,) if overtime was abolished entirely, the work would still be done, but it would create a demand for dress makers, &c., and as is always the case the supply would meet it, the result being that wages would be lowered, and for the greater part of the year (between the seasons) a large acquisition to the number of the great unemployed would ensue.

"I propose the reduction of the number of annual and weekly occasions because—

(1.) The busy seasons (two) are of about six weeks duration each time, so that, for instance, provided that overtime is necessary, three times in a week ought to suffice, and if that extends for six weeks, the number I propose 36 will cover the requirements of the trade.

(2.) Under the present regime overtime can be worked upon every night in the week except the half-holiday day.

"I have consulted medical opinion about the suspension of work at 2 p.m., and it is that the benefit which would accrue from a substantial weekly half-holiday would to a great degree counterbalance the evils attending the extra two hours upon three occasions in any one week.

"Or if a suggestion like the following is practicable, it would be beneficial:

"When overtime has been worked upon ten occasions in any workshop, one whole day's holiday shall be given to the employees within one month of the date of the last occasion (of the ten) when overtime was worked and notice of such holiday shall be sent to Her Majesty's Inspector at least seven days before such holiday is given.

IX.—Miscellaneous Observations.

i. *State of Trade.*

I have received the following reports from H.M. Inspectors on the state of trade in their various districts.

The Trades Congress observe in their report. "It is impossible "for us to speak with certainty as to the cause or causes which "have led to the present commercial depression;" but certainly the coal strike has greatly contributed to aggravate the evil, as well as bank failures and the collapse of societies mentioned by them.

Mr. Blenkinsopp, H.M. Inspector, remarks:—

"Great complaints have been made of badness of trade in boot and shoe works, yet a good deal of overtime was made in the spring, and factories and workshops are being built, the trade extending in all directions, even into villages in Bedfordshire. Kettering and Rushden

do not turn out the best class of boots, and have very little south country trade. Most of the boots made in those places go north, and into Scotland. No doubt latterly the coal strike has stopped the Lancashire and Yorkshire trade, but I am told that for two years prices have been bad. In Kettering the works are now on short time.

"Owing to the continuance of so much fine weather all the spring and autumn, the season in Luton was a long and very busy one. A great deal of overtime was worked, and I should think that it is many years since so much work was done in Luton. Yet there are complaints; chiefly among the large manufacturers who put a good deal of work out, and the warehousemen who put all work out, and have nothing manufactured on the premises. These men had chosen their patterns and agreed to prices before Christmas, and when the season came, there was such a great and prolonged demand that the small makers and home workers stood out for higher prices. Still, though the larger men may not have made anything, there can be no doubt that it has been a prosperous season for Luton generally. Instead of there being 400 or 500 empty houses, all were full, and labour was scarce. Evidently, therefore the town, on the whole, must have had a good time."

Mr. Johnston, H.M. Deputy Superintending Inspector, observes :—

"With regard to the Bristol district, which has been under my charge up to October 2, I have to report that trade in general has been slack during the last twelve months.

"In the boot trade, to make matters worse, there has been a strike of some duration on the subject of a price list.

"The system under which this industry is carried on in the suburbs of Bristol, and to a great extent in Bristol itself, is for the materials to be prepared in factories where machinery is used (viz., the sewing of the uppers and cutting out of soles and heels.)

"These materials are to some extent made up into boots on the factory premises, but for the most part in the suburbs are given out to outworkers who have small workshops attached to their houses, in which they employ boys and a small proportion of females to assist them.

"This system has a pleasing aspect of domesticity and the men have gardens surrounding their cottages in which they work for a change, but it is open to the objection that no machinery can be used and that the workers are (and will be daily more so) subject to the competition of other districts where machinery is used for almost every process.

"This fact does not augur well for the future prosperity of the trade as carried on at present.

"The example of the nail making industry in Worcestershire shows that a domestic trade subject to such competition is doomed to a painful and lingering extinction. There is, however, I think, a growing feeling in favour of extending the factories, so that the work may be concentrated in them.

"The Trades Union are in favour of this movement as enabling them the better to prevent men from taking work under list prices.

"There would be advantages for the employers too, inasmuch as they would be able more easily to control and carry on their work, and on sanitary grounds and as regards facility of enforcement of the Factory Act it is much to be desired.

"For these reasons it would scarcely be a matter for regret if the cottage workshop system were abandoned.

"Many old factory hands (married women) would, no doubt, continue to sew boot uppers in their dwelling rooms."

Mr. Bignold, H.M. Inspector, Norwich, reports :—

"The year ended October 31, 1893, has been marked by a very decided depression, which has been felt severely in the eastern counties already suffering from the prolonged troubles of the agricultural population.

"The want of employment is likely to be very great during the winter months, and already the boot and shoe industry of Norwich is in a state of extreme depression. At a meeting held on the 20th inst., it was stated by the leading employer that the number of persons unemployed was greater than he had ever known. In Colchester and Ipswich the depression is less marked but still considerable, and in agricultural engineering, which is a very important industry in Suffolk, the bad times are aggravated by the chronic state of revolution in the South American Republics who are very large customers of the Suffolk firms. Notwithstanding this, infringements of the Factory Act have been numerous, and no less than 41 firms have been convicted in Norwich, Ipswich, Colchester, Yarmouth, Lowestoft, Bury, Thetford, Cambridge, Long Melford, Haverhill, Wisbeach, Manningtree, and Chatteris. Not a single case has been dismissed and no difficulty has arisen with the clerks to the magistrates in any of these 13 districts, with whom I have in every case had preliminary conferences and satisfied myself that we were in agreement on both the law and facts of each case. In six cases where a prosecution was ordered and would have been desirable, on its appearing that the evidence would not be conclusive, I thought it better not to take the cases into court and incur the risk of a dismissal."

Mr. Jones, H.M. Inspector for Devon and Cornwall, remarks ;—

"Trade throughout the district is and has been in a dreadfully depressed state. I can hardly put my finger on any branch unless it may be the manufacture of collars and cuffs which has not suffered from the general gloom.

Owing to the continued decline of the mining industry of Cornwall and consequent upon this, the diminution of employment in engineering shops, foundries and other trades dependent to a great extent upon mining, large bodies of men are thrown out of work and the serious question arises, what is to be done for these poor men who have inborn a great love for their county and hate to leave the neighbourhood of their birth and belongings? It would seem to me that a great blessing would be confered upon these working classes if generous capitalists (for the moment not expecting any large returns for the outlay) would establish factories for the curing of herrings at places such as St. Ives, Mevagissey and Penzance. These factories would find employment for men, women and young persons, and would at the same time preserve valuable fish for export and home consumption.

"At present owing to the want of these curing places, when the catches are unusually heavy, fish in large quantities are thrown back into the sea or carted away for manure.

"I should feel most grateful, speaking in the interests of the fishing community, if this suggestion should lead some kindhearted men of means interested in Cornwall to establish as an experiment one of these factories, say, at St. Ives, and I at the same time feel assured that their money if judiciously expended will, in course of time, yield good interest."

Mr. Beaumont, H.M. Inspector, Bradford, reports :—

"I regret to say that throughout my district, with very few exceptions, this year has been anything but a prosperous one. Short time has been largely resorted to, and in almost every class of manufacture, complaints of bad trade and low prices have been almost universal.

"I notice a large increase in the production of confectionery in this district, especially in the preparation of liquorice in Pontefract.

"The coal strike here, as elsewhere, is having very disastrous effect, and the increased prices of fuel is in some mills as much as 100*l.* a week.

"The heavy woollen district has suffered from the non-importation of rags, in consequence of the outbreak of cholera on the Continent. A very good system for disinfecting rags has been brought out by a Butley firm. Steam is forced right through the vats at a great heat, and this does not I am told injure the rags in any way, and the plant has been erected in Hull for this purpose.

"I do not think there are so many half-timers in the worsted districts as there were a while ago."

Captain Kindersley, H.M. Inspector, Edinburgh, observes :—

"The general state of trade in my district, whether textile or non-textile, is deplorable.

"Reduction in the number of hands employed, short time employment, quantities of valuable machinery standing idle, are what I find on all sides.

"How far this distress is traceable to the coal strike, the unsettled condition of Ireland, the silver question in the United States, and the ever increasing foreign competition with this country, it is not for me to express an opinion here, but so far as I am able to judge by the state of matters in the south-eastern district of Scotland, though there are of course exceptional instances of continuing prosperity here and there, the general outlook for British trade and industry is a gloomy one."

Mr. Woodgate H.M. Inspector for the South of Ireland, remarks :—

"I beg to report that during the last year trade throughout this district has, on the whole, been fairly satisfactory. In some branches the industries, such as creameries and butter factories, have given a tendency to increase, while in others, such as flax scutch mills, the tendency has been rather to fall away. The creameries and butter factories are nearly all centred in the south, south-east, and south-west; while the flax scutch mills are for the most part found in the north, north-west, and north-east. In the year 1891, I find, in the Report of the Registrar-General for Ireland, the number of creameries and butter factories returned at 152, which for 1892 the number returned were 175, and I am now informed this number has been increased to 200. The factories give employment to 3,533 persons. In the Report of the Registrar-General for Ireland for 1892, just issued, I find the following important notice under 'Agricultural Schools:' 'At the suggestion 'and under the authority of the Government, arrangements have been 'made for the employment of an experienced dairy instructor, whose 'function is to visit and organise the creameries and butter factories 'throughout Ireland, and also to give general instruction in butter 'making and cheese making to the students of the model farms.' This information is extracted from the report of the Commissioners of National Education in Ireland for the year 1892.

"*State of Trade.*—With regard to flax scutch mills, Mr. Mathison, the Assistant Registrar-General, Ireland, has kindly furnished me with the following figures. In 1883 the number of scutch mills in Ireland was returned at 1,132. In 1893 this number is reduced to 976. In 1883 the number of acres under flax in Ireland was 95,943. In 1891, 74,672 acres, and in 1893, 67,444. This yearly diminishing acreage under flax necessarily tends to diminish the number of scutch mills, and the length of time the amount of flax available will enable the scutch mills to work in the year.

"I find the number of factories registered in this district is 2,660, of which 1,382 are in the north, north-west, and north-east, including scutch and corn mills, and including 352 in Dublin and surrounding suburbs; while in the south, south-west, and south-east, the total number is 1,278, a very large number being small country corn mills, which are now constituted factories under the Act, owing to their using steam and water power. In 1891 the Registrar-General (Ireland) returned the number of corn mills in Ireland at 1,482, in 1892 at 1,497."

Mr. Hoare, H.M. Inspector, Wolverhampton, reports:—

"A large variety of trades is carried on in this district, the most important are:—the manufacture of iron and steel, tubes, bridges and girders, hollow-ware, edge tools, cycles, locks, keys, fenders, fire irons, anchors, chains, nails, glass, bricks, tiles, earthenware, buttons, boots, wearing apparel, and nuts and bolts, galvanizing, japanning, and enamelling, the milling of flour, brewing and malting, building, quarrying of slate and stone, the making of encaustic tiles and china, the wool industry are of Wales.

"As the *Labour Gazette* each month sets forth the state of the various trades, I need say little about them. One and all have been depressed, save, probably, the building and its kindred trades, and this depression has been increased by the great rise in the price of fuel.

"The cycle trade, which was rapidly growing, has come to a stand, and the pressure of last season, notwithstanding an exceptionally long spell of fine weather, was but of short duration.

"The chain trade has been quiet.

"The wrought-nail and spike trades, in which a strike exists at this moment, are dying out, owing to the increased use of machinery.

"The lock trade is very depressed, much more from the keen competition amongst the makers themselves, and the sweating system pursued by the factors or middlemen, than from foreign competition. The trade is largely in the hands of small masters, who from dire necessity are easily beaten down by those who buy from them.

"The glass trades still suffer from foreign competition and the tyranny of trade unionism.

"The small flour mills in the country districts are being gradually closed, save where capital is found to put in the roller plant, as they can no longer compete with the large mills and American flour, in the cost of production.

"During the year a lead works and shot tower at Shrewsbury has ceased working, after being worked for many years with success.

"A serious blow has been caused to the woollen trade of Newtown by the failure of Lord Sudeley, who has, I fear, lost very heavily in trying to develop it.

"Despite all the efforts of the total abstainers, the brewing trade continues to flourish.

"Tailors, dressmakers, and milliners are, especially in the country towns, suffering from the bad hay harvest."

Captain Smith, R.N., H.M. Inspector, Sheffield, observes:—

"The lamentable dispute in the coal trade still goes on; our local trade is suffering very seriously, and much distress prevails.

"A severe lesson has been learnt on both sides, and perhaps, as a result, it is not too much to hope that means may be devised whereby disputes may be settled in a manner that will prevent paralysis of trade, and individual misery."

Captain Bevan, H.M. Inspector, Nottingham, reports:—

"The coal strike has paralysed trade in my district. The lace factories, which generally run from 4 a.m. till 12 midnight, have, for the last three months, been only working from 7 a.m. to 7 p.m., fuel being such an expensive item. Now that it has decreased in price in Derbyshire and Nottinghamshire and they can afford to run full time, there are no orders, so fully two-thirds of the machines are idle.

"The brick trade has also suffered, and is still suffering, in consequence; and the majority of the iron-mills and blast furnaces are at a standstill."

Mr. Prior, H.M. Inspector, Huddersfield, reports:—

"The year which has passed since I last reported to you on the condition of trade in my district cannot be termed a season of industrial prosperity. In the early part of the year the demand for cloth, our staple production, seemed to improve. An apparently increasing taste for softer materials made some of our woollen spinners very busy for a time, and the fine weather we have experienced, stimulating, as it did, a desire for new clothing, made our tailors, dressmakers, milliners, &c., during the early part of the summer, very busy. One curious effect of the exceptionally hot season has been that while other makers of ladies' clothing were very busy, mantle and jacket makers were doing little or nothing. It may fairly be supposed that this unusual demand for clothing has reduced the stocks of merchants and manufacturers; but the coal strike, which has now lasted 15 weeks, and which now, when I write, shows no sign of a speedy termination, has paralysed trade, and I cannot remember a time when so many firms were working short time as are doing so at present. I fear that the disastrous effects of this gigantic struggle cannot terminate immediately that work is resumed; but there is, I think, good reason for hoping that as the price of fuel returns to its ordinary level, and as the purchasing power of those injuriously affected by the dispute gradually returns, our staple industries may revive, and our workpeople may become more generally and fully employed.

"I last year reported to you that in Huddersfield a joint committee of employers and workmen had been appointed to enquire into the truth of an allegation that trade formerly done in Huddersfield is gradually going to Bradford, and to report on the causes of the change if proved to exist, and the best means of removing them. At that time a difference of opinion existed as to the composition of the committee, but this was soon removed by a concession on the part of the workmen. Delays have since from time to time occurred through the absence from home of merchants and manufacturers who are members of that committee, and the committee's report has so long been vainly waited for that outsiders are beginning to wonder whether the evil so earnestly

deplored is so real as it was declared to be, and whether the remedy for it is so simple as theorists would have led us to believe."

Mr. Robinson, H.M. Inspector, Dundee, reports :—

"The past few months have been marked by a great depression in the flax and jute trade. Not only is short time very general, but there is a considerable amount of machinery standing idle.

"The clauses raising the age for half-time employment from 10 to 11 came into force on January of this year. Previous to that date there were employed in Dundee about 3,210 half-timers. At the present time (i.e., November 1893), the number is not over 2,900, showing a drop of 300 in the year. I do not, however, think this decrease is due to the raising of the age for the commencement of half-time work. The depression in the jute trade above referred to, is sufficient to account for a large part of it, and the rest, I think, is due to a gradual decrease in half-time employment that has been going on for some years now. In 1883 there were in Dundee as many as 4,513 half-time children employed in the mills and factories in the town; and I am inclined to think that the feeling against the employment of children as half-timers altogether, is gradually becoming more general."

Mr. Lewis, H.M. Inspector, Swansea, remarks :—

"I do not propose this year to deal at any length with the conditio of trade in my district, for the reason that the varied features of its leading industries are periodically chronicled by local correspondents to 'The Labour Gazette,' issued by the Board of Trade; but speaking generally, I would remark that the past year has been anything but a good one; and the present outlook, I regret to say, is far from reassuring, notwithstanding the improved state of the coal trade at the time of writing.

"The hostile American tariff is still responsible for much of the slackness, but the 'bad times' are made worse by continual disputes between masters and men, resulting in strikes and stoppages, some of them most stupid and unwarrantable.

"Organisation among the workers of the district has been much weakened of late, and a lamentable lack of unity and discipline prevails in their ranks.

"At the present time, owing to divided counsels, the organisation of the 80,000 to 90,000 colliers in the district is in a complete muddle, and among the tinplate workers matters are but very little better."

Mr. Platt, H.M. Inspector, Burnley, observes :—

"Burnley looms are all practically fully employed. This would seem to indicate prosperity, but the number of empty shops in the main street sets one wondering.

"No new mills are being built, nor do I hear of any new industry.

"At Nelson two large weaving sheds have recently started, one of which is now being extended, and here, in the weaving branch, the same activity obtains as at Burnley. Two sheds have been recently stopped in Nelson, consequent on firm removing to another town. One large new weaving shed has also been started at Brierfield.

"The Yorkshire woollen trade does not appear so good in my district. The five mills of Merrall and Sons, Limited, Haworth, Keighley, being on short time.

"I know of no disputes in the cotton or woollen parts of my district, nor of any serious friction between employers and employed. Of course, we are affected by the coal crisis as elsewhere."

Mr. J. T. Birtwistle, H.M. Inspector, Blackburn, reports:—

"The past year has been a most eventful and trying one for the staple industry of this district, the manufacture of cotton cloth and the numerous trades dependent thereon.

"I should say that throughout my district 90 per cent. of the population are entirely dependant upon the cotton and kindred trades.

"The protracted strike in the spinning departments of the trade at the end of 1892 and early part of this year, although mainly confined to the districts of Oldham, Rochdale, &c., brought about a serious state of things here; the scarcity of cotton yarn, caused the stoppage of mills from three or four weeks to as many months and, at one time, I should say that at least one half the machinery throughout the district was at a standstill, and a great proportion of the remainder running short time only. During the greater part of this period thousands of workers and their families were reduced to a state of starvation, probably never experienced in this neighbourhood since the American war, nor exceeded in the strike district itself.

"Unlike the strike district, in a very few instances only were the funds of the trade societies available for distribution amongst members; had the stoppages been caused through a dispute of their own, things might have been different. Everything possible, however, was done to allay the suffering of these workers; relief parties organised by corporations, societies, and private individuals, did useful work in the distribution of thousands of pounds worth of bread, soup, &c.

"Following this period there came two or three months of quiet trade, until the commencement of the dispute in the coal trade in July. At that time, the cotton trade was, I am assured, in an improving condition; that improvement has, fortunately for this district, been continued. Had it not been so, there would, without doubt, have been a recurrence of the stoppages experienced earlier in the year, employers would or or could not have run their works at an increased cost of, say 15*l.* per week for coal for a small mill, to over 300*l.* per week, the additional cost to one large firm, per week in October.

Mr. Tinker, H.M. Inspector, Bolton, remarks:—

"In submitting my report for the year, I may say that the cotton trade, which is the principal industry of this district, has been fairly good, and notwithstanding the fact that the coal war has been going on during the last 13 weeks, causing some of the largest employers of labour to pay from 100*l.* to 150*l.* per week more for coals than they did before the crisis, most of the factories in and around Bolton have continued to work full time."

Mr. Sedgwick, H.M. Inspector, Walsall, observes:—

"In submitting my report of the Walsall district for the past year, I regret to have to state that the trades in the district have been in a generally depressed condition the whole of the year, and this depression has become intensified by the dispute in the coal trade. The staple trades of Walsall (viz., saddlery and harness making), have suffered considerably, but there are hopes that the advent of the new year, and the modifications in the McKinlay Bill, will tend to improve matters in these trades."

Mr. D. Walmsley, H.M. Inspector, Stockport, observes :—

" In presenting my annual report I may remark that trade in this district, which includes, cotton, silk, hatting, engineering, and salt, has been more depressed this year than usual.

It is within the knowledge of all how the prolonged dispute in the cotton trade crippled and diminished the output of other trades, notably the felt hatting and the silk trade.

" From enquiries I find there has been a large falling off in the home trade, attributed chiefly to the prolonged fine weather, which caused numbers to discard the felt hat and wear the more comfortable straw hat.

" Agricultural depression and strikes are held to account for a considerable portion of the contraction; these, together with the general trade depression has caused one of the worst seasons that felt hat manufacturers have experienced for a number of years.

" The export trade in felt hats is much the same as last year, as will be seen from returns below :—

Quarter ending.	1892.		1893.	
	Quantity in Dozens.	Value.	Quantity in Dozens.	Value.
		£		£
March 31 - -	118,121	250,052	181,795	248,214
June 30 - - -	108,637	157,144	100,286	147,261
September 31 - -	134,870	202,450	158,634	220,097

" Thanks to the poor, despised and troublesome rabbit in Australia, for by its aid we can now obtain a light, healthy, and comfortable felt hat from its fur, at a price very little in advance of the price paid for a wool hat. This branch of the trade is being more developed than formerly, because of the comparative cheapness of the fur, and the increased demand for this class of hats.

Macclesfield has for a number of years been the chief seat of the silk trade in this country. The past year has not been characterised by any special features of interest. The throwing (or spinning) trade which supplies other silk districts, and exports partly to the Continent, has been fully employed during the year. During the early portion of the year the weaving trade was fairly active, but for the last few months has been unusually depressed, a great fall in value has taken place, and the autumn season trade is abnormally late.

" Trade disputes, general depression, and the unsettled condition of foreign money markets are held responsible for the present slackness of trade. From these and other minor causes the manufacturers do not anticipate a speedy return of good trade.

" The salt trade has been depressed during all the past year, entailing great privations on numbers of the workers, and at the present time, the outlook is not by any means cheery."

Mr. Johnson, H.M. Inspector, Newcastle-on-Tyne, remarks :—

" Shipbuilding, which is the principal trade here, has, I regret to say, been but poor for the last twelve months, and the prospects for the next winter are but poor. Many builders in order to keep their men together are laying down ships on speculation, or what is not much

better, on the system of payment spread over five or six years, or as one builder said to me, on the "piano hiring" plan.

"The coal trade I am pleased to report is doing the best of any as the strike in the Midlands has not been followed by the miners of Durham or Cumberland, who had a bad time last year through strikes."

Mr. Ashworth, H.M. Inspector, Ashton-under-Lyne, reports :—

"*Trade.*—The condition of trade has been of the most trying description. During 1892 the cotton trade had become very bad, and the millowners found it necessary to ask the operatives to submit to a reduction in wages. The operatives resisted the reduction, and the result was a stoppage of 20 weeks duration, and the result was scarcely anything, the operatives accepting a reduction of 7*d.* in the pound, or a trifle over 2½ per cent. This stoppage, however, has had the effect of clearing the markets of a large amount of stock, and I hear that there would now be a little margin in spinning, if it were not for the increased cost of coal caused through the terrible dispute which is now going on in the coal mining industry. The enhanced prices of coal consequent on this dispute is handicapping many of the manufacturers severely. I hear of its costing one firm in this district 500*l.* a week over and above what it cost them when coal was at its normal price. Many of the works have gone on short time, or stopped at times altogether, to economise in the coal bills as much as possible. This is causing great hardship amongst the operatives, and I am afraid the outlook for the winter is very unpromising."

ii. *Social Progress and Technical Schools.*

In writing on social progress in his district, Mr. D. Walmsley, H.M. Inspector, Stockport, observes :—

"Stockport is in the foreground in this essential part of our education; there is a fine and extensive building, fully equipped with teachers, and every requisite to meet the requirements of the numerous intelligent students who are taught all the various scientific and technical subjects, more especially connected with the trades of the locality.

"Macclesfield is earnestly taking up the question. A sum of money has been raised for a new school, the land has been purchased, plans drawn for the building, and very shortly, it is hoped, a suitable school will be erected worthy of the town and the cause it is being prepared for. In the meantime a number of students are located in the Mechanics' Institute, where for a number of years technical classes have been held in silk manufacture.

"It is pleasing to notice that, notwithstanding several severe and prolonged labour disputes, the feeling between employer and employed is more sympathetic than formerly. The employer finds the workman better educated, that he has a much better knowledge of industrial questions, and that he is, also, educationally superior to his forefather. These qualities help to raise the workman socially, and tend to bring him in closer contact, and bridge over what was formerly a great gulf between employer and employed.

"This is probably found to a great extent in the town of Crewe. Crewe, as is well known, is almost an unique town in many respects; its most notable features are—(1) an entirely industrial town; (2) formerly and now almost supported by one firm, viz., the London and

North-Western Railway Company; (3) a comparatively new town, and brought into existence to meet the exigencies of railway progress.

"Having spent much official time in Crewe, and more especially within the extensive works of the London and North-Western Railway Company, I have often been struck with the sturdy, self-reliant, and intelligent demeanour of its toiling masses. I have been pleased to notice the individual interest taken by the company in its workers, and to note the great assistance given to its employees. They have established and assisted a number of organisations which may well be emulated by others; (1) among others may be mentioned the gift of a public park, in commemoration of Her Majesty's Jubilee; it covers some forty acres, and is laid out with ornamental grounds and water; (2) the liberal support given to the Works Mutual Insurance Society, a most admirable society, which disbursed nearly 3,000*l.* last year amongst its members. Towards this amount the company subscribed the sum of 993*l.* The most notable feature of this society is its economical management, the total expenses (including salaries) being some 60*l.*, or only 2 °/$_o$ on its business.

"The Mechanics' Institute is a splendid organisation, where its hundreds of students take up the various science, art, and technical subjects, more especially those allied to the engineering trade. I was pleased to notice that 37 Whitworth scholars had emanated from this institute since 1872 (15 of these since 1888). I find that the railway company subscribed no less a sum than 492*l.* last year as apprentices' premiums, for admission to the various classes.

"Taken altogether, Crewe is in the foreground of most towns in its educational progress and facilities offered to its studious workers.

"Another commendable feature is the extensive dining halls provided by the company for the free use of its men; the largest hall provides accommodation for 800 men. Special cooks and attendants are provided, and the greatest order and regularity prevails. Each seat is numbered, together with vessels, &c., for tea, cooking chops, heating pies, puddings, and the like.

"This is in striking contrast to the want of assistance at a large thread mill in Scotland, which came under my notice a few years ago, where during the dinner hour the women were obliged to leave the rooms and sit on the factory steps, no other place being provided.

X.—Education and Employment of Children.

i. *Raising of the Age at which Children may be employed.*

I have received the following reports from H.M. Inspectors, as to the effect in their districts of raising the age at which children can work from 10 to 11, which appears to be working satisfactorily.

Mr. Bowling, H.M. Inspector, Southampton, reports:—

"The raising of the age for the first employment of children from 10 to 11 scarcely affects this district, where very little children's labour has ever been made use of."

Mr. Cooke Taylor, H.M. Inspector, Coventry, remarks:—

"The raising of the age for half-time work has not apparently been productive of any inconvenience in this district, where, however, very few half-time workers are employed."

Mr. Jones, H.M. Inspector for Devon and Cornwall, observes :—

"General feeling has been on the whole adverse to raising the age to 11 years before a child can be employed in any factory or workshop, but as there are comparatively few children employed in my district the change will make very little difference to the conditions of labour."

Mr. Woodgate, H.M. Inspector, Dublin, observes :—

"With regard to raising the age of half-timers from 10 to 11, I cannot report any case of hardship which has come under my notice."

Mr. Hoare, H.M. Inspector, Wolverhampton, remarks :—

"The raising of the age of children for first employment has made no difference in this district, they rarely begin work before they are 12 years of age, the standards of exemption are high, it is usually the fourth, and the school authorities do their best to discourage half-time, apparently thinking that book learning alone is necessary for a child destined to become a workman or workwoman.

"No children are now taught nail making."

Captain Bevan, H.M. Inspector, Nottingham, reports :—

"Half-time employment is so rare in my district, with the exception of a few children employed in some bleach and dyeworks, that the raising of the age for first employment to 11 years is not objected to, either by occupiers or operatives. The school board authorities still discourage half-timers, and they are gradually being extinguished in many districts, to the relief, I think, of the manufacturers."

Major Roe, H.M. Inspector, Birmingham, remarks —

"I have never heard the subject mooted as to whether the raising of the age for work to 11 years is beneficial or not, probably because in my district, half-timers are practically extinct. I seldom come across one, but when I do it is a child at least 12 years old who has got into work full time through a misstatement of his or her age.

"The Education Department regulations as to children passing in class instead of individually has produced the following effect, that the larger proportion of children between 13 and 14 qualify for full time employment by producing the due attendance certificate instead of the qualifying school standard, thus what was originally intended as the exception is rapidly becoming the rule."

Mr. Prior, H.M. Inspector, Huddersfield, observes :—

"The number of half-timers employed in my district is gradually and steadily diminishing. Very few children are now employed here in cotton spinning; and in woollen spinning and manufacturing it is seldom that we find a child working, unless it be for one or two firms employing them in shawl fringing. In hearthrug weaving 10 children were employed a few years ago where one is working to-day. Children are still employed in worsted spinning and silk spinning, but I believe that the change in the standard of employment from 10 to 11 years of age has been effected in these trades without friction and without hardship. Employers generally wish to avoid the trouble and responsibility attendant on the employment of children if they can readily obtain duly

qualified full-timers; and parents are beginning to find that it is more profitable to them and more advantageous to their children to qualify them properly for full-time employment at 13 years of age, than to hurry them off to the mills at 11 as half-timers."

Mr. Lewis, H.M. Inspector for South Wales, remarks;—

"The raising of the age for first employment on the half-time system is, in my opinion, a step in the right direction, but it has no appreciable effect in a district like mine, where the number of half-timers employed is almost *nil*."

Mr. Hine, H.M. Inspector, Leeds, observes:—

"The number of children now employed in my district is so very small that I am hardly in a position to judge of the result of raising the age to 11."

Mr. Arnold, H.M. Inspector, Worcester, reports:—

"The number of half-timers employed in this district is so very small, that the raising of the age for first employment to 11 has made no appreciable difference."

Mr. Platt, H.M. Inspector, Burnley, reports:—

"*Raising in age from* 10 *to* 11.—The tendency of opinion seems to be that the change will prove beneficial. Employers to whom I have spoken on the matter seem quite indifferent to the change, and taking the statements of board school officers, parents do not complain so much as at first. Personally, I have not had a single complaint from any parent, and this in a district of upwards of 6,000 factory and workshop half-timers. Burnley being answerable for about 4,000."

Mr. Tinker, H.M. Inspector, Bolton, reports:—

"There are considerably over 4,000 children working as half-timers in the district of which I have charge, and the raising of the age from 10 to 11 years, so far as I have been able to gather information has not done any harm, nor have I heard it spoken about as having done a great amount of good.

"I do not know of any agitation or wish in favour of the further consideration of this subject."

Mr. Ashworth, H.M. Inspector, Ashton-under-Lyne observes:—

"With respect to the raising the age of children for half-time employment, I think the result cannot fail to be beneficial to the health of these children. The change has been made easily and without friction. I have heard no complaints from parents, and I should be glad to see the age raised to 12 in a little while; the number of hours required to be worked by these young children in the close and vitiated atmosphere of many of our factories, cannot fail in many instances to be prejudicial to their future health."

Mr. Edwards, H.M. Inspector assisting in South Wales, remarks :—

"There is little or no child labour employed in this section of the district, therefore the alteration in the age for the first employment of children has had no appreciable effect."

ii.—*Standard of Proficiency*

In former annual reports, attention has been drawn to the inconvenience attending variable standards which children must pass previous to employment. Your order of the 7th August, approved by the Education Department, obviates this difficulty so far as children of thirteen are concerned, and will prevent the necessity of parents removing from a road in one parish to an adjoining road in another parish to enable their children to work under a lower standard. My experience in factory legislation leads me to believe that definitiveness and uniformity give the most general satisfaction.

A fixed and uniform standard is a great improvement; this order will not come into force until the 1st September, 1894, and it was thus referred to in the report of the Parliamentary Committee of the Trades Congress :

"It will thus be observed that ample notice is given to all concerned, so that every arrangement necessary for the enforcement of the same may be carefully attended to before the time fixed for the change referred to above."

A most valuable and interesting report has been prepared by a departmental Committee appointed by Mr. Acland, the Vice-President of the Council of Education; the Committee of enquiry consisting of Mr. Tucker, Assistant Secretary, Education Department, nominated by the Vice-President, Mr. Troup, Senior Clerk, Home Office, nominated by the Secretary of State, and Mr. Llewellyn Smith, the Commissioner for Labour in the Labour Department of the Board of Trade, nominated by the President of the Board of Trade. The reference to the Committee was as follows :—

1. Enquire into and report upon the facts as to the considerations of exemption, total or partial, from school attendance, and the corresponding conditions of school attendance in Great Britain with reference to child labour.

2. Report on the facts as to similar conditions in foreign countries.

It contains so much information in a condensed form that I recommend manufacturers, trade societies and those interested in child labour, to obtain a copy, the price being twopence-halfpenny.

The following tables, extracted from the report, showing the number and ages of half-timers attending schools in Oldham, Bolton, Blackburn, Bradford, and Leicester, and the occupations of half-timers in Bradford, Blackburn, and Leicester, will be useful for reference.

I.—TABLE showing the NUMBER of HALF-TIMERS of various ages employed in Factories, Workshops, and at other employments in the undermentioned Towns in February 1893.

Localities.	Number of Half-time Scholars				Total.
	From 10 to 11 Years of Age.	From 11 to 12 Years of Age.	From 12 to 13 Years of Age.	From 13 to 14 Years of Age.	
	FACTORIES.				
Oldham - - - -	349	752	980	98	2,179
Bolton - - - -	449	1,006	1,341	65	2,861
Blackburn - - -	982	1,620	1,741	146	4,489
Bradford - - - -	490	1,333	1,840	381	4,044
Leicester - - - -	5	84	133	11	233
Total - - -	2,275	4,795	6,035	701	13,806
	WORKSHOPS.				
Oldham - - - -	46	99	130	13	288
Bolton - - - -	28	85	126	4	243
Blackburn - - -	20	50	62	9	141
Bradford - - - -	11	49	91	19	170
Leicester - - - -	17	102	113	5	237
Total - - -	122	385	522	50	1,079

II.—Table giving details of OCCUPATIONS of HALF-TIMERS of various ages attending school in Bradford, Blackburn, and Leicester in February 1893.

Occupation.	Number of Half-timers aged				Total.
	From 10 to 11 Years.	From 11 to 12 Years.	From 12 to 13 Years.	From 13 to 14 Years.	
A.—FACTORIES:					
Cotton - - - -	982	1,623	1,746	148	4,499
Worsted - - - -	476	1,301	1,787	370	3,934
Wool - - - -	—	4	5	—	9
Silk - - - - -	14	31	44	9	98
Hosiery - - -	4	19	20	1	44
Dyeing - - - -	—	4	9	—	13
Shoes - - - -	1	32	80	6	119
India-rubber - - -	—	11	10	2	23
Others - - - -	—	12	13	2	27
Total Factories - - -	1,477	3,037	3,714	538	8,766

Occupation.	Number of Half-timers aged.				Total.
	From 10 to 11 Years.	From 11 to 12 Years.	From 12 to 13 Years.	From 13 to 14 Years.	
B.—WORKSHOPS:					
Milliners and dressmakers -	5	16	24	3	48
Rope - -	4	13	20	6	43
Bakers and confectioners -	4	9	11	1	25
Paper bag - - -	—	5	9	—	14
Shoe - - - -	6	70	63	—	139
Ironfounders - -	1	7	4	3	15
Machinery - - -	2	3	11	5	21
Cigars - - -	1	5	7	—	13
Fire-light - -	3	6	9	2	20
Machine stocking knitting -	4	8	14	1	27
Hosiery - - -	4	9	13	—	26
Others - - - -	14	50	81	12	157
Total Workshops - -	48	201	266	33	548

iii.—*Employment of Children on Saturdays.*

Mr. J. T. Birtwistle, H.M. Inspector, Blackburn, reports as follows:—

"*Child employment on Saturdays.*

"The prohibition of employment on two successive Saturdays has brought about amongst cotton weavers, an arrangement which is a source of great danger to children. Two weavers, say, with four looms each, both employ children but in different sets, *i.e.*, each working different Saturdays, will arrange that the child whose turn of employment it may be, shall sweep both sets, that is, eight looms.

"For the purpose of sweeping, &c., weavers are supposed to stop one loom at a time, and so far as the weaver for whom, and by whom, a child is employed, this is usually done, the weaver often being a relative or friend of family, and having taken child to teach him his trade feels that a certain responsibility rests upon him as to child's welfare, but things are quite different when such child proceeds to sweep the looms of the other weaver; he is often made to sweep the frame work and fixed parts of the loom generally, with loom in motion, and from the number of accidents that have occurred, must have had to clean wheels, &c., in addition.

"I have had occasion a many times, to severely caution weavers as to this practice of cleaning machinery in motion, and I have on several occasions traced accidents directly to this practice; such accidents are generally only contusions, but in some cases have resulted in the loss of a finger.

"This is a very difficult matter to deal with, as many children are employed, and it is impossible to detect this cleaning, or sweeping, except when very close thereto, the weavers are well aware of its illegality, but as they can stop the loom instantly upon approach of any one in authority, it stills goes on, and so long as children are employed in this work will continue to do so, it being, in my opinion, next to an impossibility to put a stop to it. Ten men in an ordinary sized shed,

would be unable, doing nothing else, to prevent or detect in all cases, this practice.

"Several remedies have been suggested to me, such as allowing all children to work, say, from 10 a.m. to stopping time each Saturday; the exclusion of children entirely from the mill on that day, allowing them to work a full day (fixed by notice) during the week; and, perhaps the most practicable, allowing children to work every Saturday the half-day, with a fixed day during each week upon which children must not be employed in the factory at all; this would prevent the child being called upon to do double duty (sweeping and cleaning eight looms), and would give the children two half-days holiday, including Saturday, each week instead of, as at present half-day one week and full day Saturday next week.

"The second proposal, total exclusion on Saturday and full days' work during week, is objectionable, as it would mean the loss of one school attendance per week, besides, the children would doubtless not escape the cleaning entirely, as another day would be fixed, other than Saturday for this work.

"*Section* 87.

"A short time ago I had a prosecution at Accrington, Lupton Bros., failing to obtain certificates of fitness. Defendants took advantange of this section, laid informations against their clerk, satisfied magistrates they had used due deligence, &c. Clerk was convicted in costs, *i.e.* costs incurred by defendants in informations laid by them, magistrates deciding they had no power to order this clerk to pay costs incurred by me; I had not summoned him.

"I take it this was far from the intention of legislature in passing this section, and that, in any case, actual offender, whether brought before the court by inspector or his employers, should be liable to all costs incurred, from original information to hearing inclusive.

"*Section* 55. *Turkey red dyeing*.

"The late Mr. Henderson informed dyers in this neighbourhood that this section could not be taken as applying to the new and quicker process of obtaining this particular colour, viz., the alazarine process.

"Employers in this branch, without exception, contend that Turkey red is the name of a colour and not a process, and that the liability to spontaneous combustion still exists, though not arising from exactly the same cause, and, I believe, in cases where, as they say, the necessity arises, work is continued until process is complete, claiming the right to do so under this section.

"In calico printing there are also colours or dyes, such as aniline black, which are, at certain stages of process, highly inflammable. I am assured these goods must reach a certain stage before being left; employers, after hours, get men to take the place of boys, but frankly admit that when they cannot get men they work the boys, and would have to do so in spite of all pains and penalties, the danger is so great."

iv.—*Prevention of Cruelty to and Protection of Chilaren Act*, 1889.

Return of licenses granted under Section 3 of the Prevention of Cruelty to and Protection of Children Act, 1889, forwarded to

the Factory Department during the year ended 31st October, 1893.

Licenses granted to Theatres, &c. - - - -	32
,, ,, for School Entertainments, &c., continuing more than one evening - - -	2
Licenses granted for School Entertainments, &c., for only one evening - - - - - -	2
Total - - - -	36

Eleven of these licenses were for the same child, who performed at different places. It is evident, from the following remarks of H.M. Inspectors, that licenses are not obtained in some cases, and if a child under seven is employed and it comes to the knowledge of H.M. Inspector, I think he should have power to interfere.

Mr. Cramp, H.M. Superintending Inspector for the Midland counties, observes :—

"Seventeen licenses under Section 3 of Protection of Children Act, 1889, were granted by magistrates in various Midland towns during the year, and enquiry duly made by H.M. Inspectors as to whether the conditions of licences were obeyed. There is, however, reason to fear that some children under 10 are employed in theatres without any license. In September last, Mr. J. H. Walmsley, H.M. Inspector, Stoke, drew my attention to the fact that a child *aged six* was performing at the Longton Theatre, and that she was announced for the following week at the Stafford Theatre. I informed the deputy-chief constable, and he caused proceedings to be taken, with the following unfortunate result :—

"STAFFORD.

"*Young Children on the Stage.*—At the Borough Police Court, yesterday, Edgar Ward, manager of the Miss Esmeralda Theatrical Company, was charged under the Protection of Children's Act, with causing a little girl, named Florrie McTurk, under seven years of age, to perform on the stage for profit. Inspector Stretton said he visited the Lyceum, where defendant's company were playing, on Tuesday evening, and saw four girls dancing, and afterwards the girl Florrie, who was several times encored for her singing and dancing, and had coin thrown to her on the stage. He ascertained that she had been with the company about six weeks, having performed at Blackburn, Preston, Crewe, and other towns, but the application of the manager for a license had proved ineffectual, although a medical certificate was produced of the child's fitness as far as health was concerned. The manager, who appeared, said he did not desire to break the law, and every care was taken of the girl, whose father was dead, and the little one, who was in court in charge of one of the ladies of the company, bore out his statement. The Mayor stated that a technical offence had been committed, and advised defendant to withdraw the child from the stage, the magistrate's clerk remarking that no magistrate had the power to grant a license for a child under the age of seven. The defendant promised to withdraw the child, and the case was dismissed."

Mr. Dodgson, H.M. Inspector, assisting in Sheffield, remarks :—

"Under the Protection of and Prevention of Cruelty to Children's Act, inspectors of factories are occasionally called upon to inquire as to whether the conditions attached to a license, permitting children under 10 to take part in theatrical performances, are fulfilled. But no power is given to inspectors, in case a child is discovered performing without having a license taken out previously on its behalf. I regard the provision referred to as being defective; either more plenary and direct power to take proceedings at once should be granted to an inspector, or his position under that Act should be eliminated. I lately found, on two separate occasions, a child of five years of age, another of eight years, the latter remaining in the theatre until nearly 11 o'clock p.m., engaged nightly without a license. In both cases, thinking I had no power to interfere, I called the attention of the magistrates' clerks and chief constables in the towns where the performances were taking place, first, to the total illegality of the engagement of a child only five years of age, and second, to the engagement of a child of eight years without license. In both cases the managers of the company were suffered to leave the towns with nothing more serious against them than a feeble caution. In the latter case, had a license been issued, and the child remained five minutes beyond the time thereon stated, without doubt a severe penalty would have have been attached to the delinquency; but, apparently, provided no license is obtained, a theatrical manager is permitted to employ children upon the stage under whatever conditions he likes, and that without fear of punishment."

XI.—Truck Act.

This act is very unsatisfactory, and requires amendment. The Labour Commission have drawn attention to various deductions on payment of wages, but the decisions of the Higher Courts are so embarrassing to magistrates that Her Majesty's Inspectors are often uncertain as to the proper course to adopt.

With reference to some remarks in the reports of the Royal Commission on Labour Captain Bevan, H.M. Inspector, Nottingham, observes :—

"My attention has lately been called by H.M. Chief Inspector, to alleged breaches of the Truck Act in my district in the neighbourhood of Mansfield and Sutton-in-Ashfield, reference to which is made in the report of the Labour Commission lately issued.

"From inquiries I have made it appears there are in the district named certain persons, who may be termed middlemen; they locally go by the name of bag-hosiers; they are not occupiers of workshops, but generally keep a small grocer's store. They obtain from the hosiery factories, in Nottingham and district, seaming work, that is, articles of hosiery, made by power, which are not seamed up; these articles, stockings, &c., are given out by the middleman to workers in his village (often colliers' wives) to seam by hand. Payment to these seamers is often made in kind, that is, in tea, bacon, cheese, flour, &c. In the report I mentioned, these articles are stated to be charged for by such middlemen, at a higher rate than the ordinary price in an ordinary grocer's shop. This statement appears to be correct, as the prices compare with the

co-operative store prices; and possibly an evasion of the Truck Act here exists, but such cases cannot come under the cognisance of the factory inspector, as the work in question is not carried on in workshops. The workers under this system, do not, as far as I can ascertain from them, seem inclined to complain, and, unless they do complain I do not see how such a system can be put an end to. I have thought it necessary to make these remarks, as the report I have referred to might be taken as reflecting on the way in which the Factory and Workshop Act, and other Acts relating thereto, are administered in my district. It is, however, evident that middlemen do exist both in the hosiery and lace trades; whether for the benefit or otherwise of the working classes it is for them to decide; apparently, a great deal may be urged on either side, and it is a question that must be dealt with, if taken up as under the Truck Acts, with due consideration."

Mr. J. T. Birtwistle, H.M. Inspector Blackburn, reports:—

"From enquiries I have made during the year, I find that a custom has for many years obtained in this district of deductions from wages for various objects, such as amounts varying from ¼*d.* to ½*d.* per loom towards the payment of a man to carry yarn from the warehouse to looms and finished cloth from looms to warehouse; similar deductions towards the payment of a man to oil the machinery, and in one case towards the payment of a person to wash out of the cloth, black or dirty oil that may have dripped from machinery in process of manufacture. In cases where no such deductions are made the work is generally done by the weavers themselves. The employers contend, that this plan was adopted and is maintained at the wish of workers as being a saving to them of time, and allowing greater devotion to work, which means increased wages, and also, that in the case of oiling, workers are wasteful and, when so, the waste oil drops upon cloth. On the other hand, the workers allege that it is of far greater importance to employers and that they can well afford to pay these men themselves. They get increased production from machinery and, if allegation as to waste of oil is correct, a saving in oil and production of cleaner cloth.

"Where I have found any such deduction made, I have required firm to at once discontinue the practice; all have complied. In some cases, the services of these men have been dispensed with, in others, a collection is made from workers after receipt of wages, to defray such payment."

XII.—Laundries.

The Trades Congress of 1893 unanimously passed the following resolution:—

"That this Congress would strongly urge upon the Government the desirability of including laundries under the Factory and Workshops Act."

Attention was drawn to the matter by the Royal Commission on Labour, and also by the council of the Women's Protection and Provident League, Scotland, a statement from whom I insert below.

You directed special enquiries to be made by 44 inspectors in various districts, and this was accordingly done, and much valuable information was collected, amongst others, by Miss Abraham and Miss Paterson, who gave special attention to the matter; their

reports showing the advisability of adding clauses to the Factory and Workshop Acts, securing the fencing of engines and dangerous machinery, and the restriction of the hours of children and and young persons, and securing proper sanitary arrangements in laundries. The appointment of female inspectors will facilitate the inspection of this class of works if included in an amending Bill.

The following remarks are extracted from the report of the Women's Protective and Provident League of Glasgow:—

"The council of the Women's Protective and Provident League having had brought before them by statements made to officials of the league, and in other ways, the long hours worked by women and children employed in laundries, and the unsatisfactory conditions under which in many cases the work is carried on, resolved to institute an enquiry into the whole circumstances of the employment of women and children in this industry.

"The inquiry was undertaken by Miss Irwin, formerly organising secretary of the council of the League, and late Assistant Commissioner under the Royal Commission on Labour. On receiving her report the council passed the following resolution:—

"'That the conditions of women's labour in public and private laundries of this and other cities of Scotland, disclosed by Miss Irwin's Report, make it absolutely necessary that these laundries should be brought under State regulation and inspection:

"'That, in particular, it has been shown that the number of hours per week during which these workers are forced to labour is often excessive, and that the evils of such excess are greatly aggravated by the irregularity with which the work is distributed between different days, and especially by the way in which it is often continued through part or the whole of Saturday night:

"'That the conditions under which this protracted labour is undergone are often unhealthy, the laundries often being so constructed or arranged, that it is impossible to prevent the temperature from rising to 86° or upwards:

"'That it has been shown by the testimony of skilled persons, and by the facts of supply and demand, that there is nothing in the nature of the business to make these evils, and particularly the excessive hours of labour, necessary, but that individual employers in competition with each other are altogether unable to remedy them, even when they are willing:

"'That, therefore, in the opinion of the Women's Protective and Provident League, there is an urgent necessity that the laundries should without delay be brought under the Factory and Workshop Acts with a view to the limitation of the hours of labour, and the securing of healthy conditions in the buildings in which the work is carried on.'"

The Women's Industrial Defence Committee, London, instituted an enquiry into the circumstances of this employment with a view to discovery if a limitation of the hours of adult women working therein was necessary or desirable, and published the result of their enquiries.

They passed the following resolution:—

"That while admitting the desirability of protection for children, the Women's Industrial Defence Committee protest emphatically against

any interference with the hours of labour of adult women in laundries, being convinced that such interference would deprive a large number of women of a means of honest living."

From the reports of H.M. Inspectors, I consider that it is desirable that laundries should be placed under the Factory Acts for the purpose of securing the following ameliorations in the condition of those employed therein.

1. Fencing of engines and dangerous machinery.

2. Keeping down the temperature of the ironing rooms by proper ventilation or fans where required, preventing overcrowding, and the separation of the stove from the workers.

That where gas irons are used they should be such as do not emit offensive fumes.

3. Conveying away the steam from the washhouses by ventilation or the use of fans. Securing the proper condition of the flooring and drainage, and the provision of boards or grids to keep the women's feet dry.

4. Regulation of the hours of work of children and young persons.

Another day or other days to be substituted for the Saturday half-holiday, so that it may be given to washers, ironers, and sorters and packers on different days, and in the forenoon or afternoon as suits the special circumstances of each firm.

5. As the principal objections come from nunneries, such places, together with charitable institutions, to be visited only in case of complaint and under the special instructions of the chief inspector, the nunneries to be inspected only by lady inspectors.

XIII.—Concluding Remarks.

In one of your speeches you remarked "that you did not think "there was any part of our legislation for the last fifty years upon "which we can look back with more solid satisfaction, than on the "series of laws and executive institutions by means of which the "employers of labour in this country have been compelled to con- "form to that which was already the practice of the wisest and most "public spirited among them, with respect to the sanitation of their "places of business, and to the hours of labour of those whom they "employed. However largely you may increase and render effec- "tive the system of central inspection, you cannot lift more than "a finger to get rid of the gigantic social evil, unless you can "enlist on your side the co-operation with the officers of the central "authority, the various local authorities of London, as well as "the County Council. It is only by the united, intelligent and "harmonious action of the central and the local powers, that you "can bring about the attainment of a result upon which all social "reformers without distinction of party ought to be, and as you "believed were, united, meaning the securing for those who carry "out through long and dreary hours hard and irksome toil, at least

"that the conditions under which they labour shall be fit for "human beings, not for brutes merely." Thoroughly agreeing with these views I think there is another very important element; that is, the hearty co-operation of the protected persons themselves, and that we have not had. I was very gratified to find that at the last Trades Union Congress in September 1893, attention was drawn to this point and a resolution passed as follows, as an addition to the report of the Parliamentary Committee. "But "this Committee regrets the apathy and neglect of workmen and "workwomen in not informing their respective factory inspectors "in their districts of the dangerous and insanitary condition of "the factories in which they are employed"; the mover of the resolution remarking that workmen and workwomen wrote from all parts of the country about petty little complaints, while if they were to go to the secretary of their trade union he would put the local factory inspector upon the particular workshop or factory; and that nine out of ten workmen would submit to insanitary conditions rather than take the trouble of addressing an anonymous postcard to the nearest factory inspector, who would be obliged to attend to the matter.

Sir William Harcourt, when Home Secretary, observed to a deputation from the Trades Union Congress, "It has been sug"gested that there are a great number of workshops which have "never been registered at all. Now, I should have thought, "though you will know better than I can, that the trade "organisations, which are so useful and powerful, are perfectly "capable of supplying the inspectors with lists of the workshops "and factories within the range of their operations, and which, "within the area of their unions, ought to be subject to inspec"tion.

"That is a thing of which no one could complain. It seems to "me that the trade organisations ought to make out complete "lists, within their several districts, of the different factories and "workshops which ought to be subject to the operation of the "Act. That is a thing of which no one could complain and I "should have thought that individual workmen might, to a great "extent, be so relieved from any personal conflict with their "employers by the trade organisations bringing under the notice of "the inspectors the things which they consider to require "observation, screenedly. I have submitted this, of course, with "much less knowledge than you gentlemen who are versed in the "facts of the case, but I bring the question respectfully to your "consideration, because I think in that manner you might "multiply, to a great degree, your own forces and the re"sources of the inspectors by properly and legitimately "bringing to their notice things that otherwise may escape their "observation."

As stated in my last annual report, 32,100 notices were exhibited at the post offices and police stations in 1892, informing the protected classes as to what complaints should be sent to the local authorities, and what to the inspectors of factories, and

stating that any complaints sent to Her Majesty's Inspectors of Factories will be considered confidential.

I think it highly advisable that there should be an assistant and a recognised public office in every inspector's district, but if the protected classes will only assist to a reasonable extent it is quite unnecessary to increase the present staff of inspectors beyond a very few appointed for special service.

Formerly, except in London, H.M. Superintending Inspectors had no offices or clerical assistance; but recently, not only as centres of communication for the inspectors of the district, but also for the convenience of employers, trades unions secretaries, and other representatives of the workmen, offices have been opened in each division of H.M. Superintending Inspectors and a clerk appointed at each office, viz., at Birmingham, Leeds, and Glasgow, to assist in clerical work. This is a great improvement, and has much assisted in the carrying out of the duties to be performed by the Superintending Inspectors. It is very desirable that the same plan should be adopted in the various districts of H.M. Inspectors. There ought to be a recognised *permanent* factory office in every district, so that, even should the individual inspector be changed, all may know that the inspector of the district can be found there, and thus no one may be able to plead ignorance as to where notices should be sent.

In connection with a recent strike, complaints in connection with which works entailed on the inspector of the district much time and trouble, the President of the Trade Association remarked to the weavers on strike, relative to some point in dispute, "They "needed to look to themselves in the first instance. It perhaps "arose from them. What did they want going to their work at "half-past five in the morning and stopping till six o'clock at "night? It was done. They had known people who went at "half-past five and worked during the bell-hour taking off cuts "and piecing up ends. These he thought were the instigators of "driving throughout the length and breadth of the town. He "should like them to look at themselves, and if they wanted "justice done to them they must begin at home. This was not "the first time he had mentioned this, but it made no difference. "Personal interests were all that they thought of. It was which "could get the most. Just the same with the tackler. It was "who could get the best average. If they took his advice they "would look more to the Factory Acts.

"Not only had they reports about driving but cases of overtime "were reported to the Committee.

"According to report they were not allowed 30 minutes for "breakfast, but 15, 17, and 18, and one morning they got 23 "minutes. The question was 'Who was to blame for this?' Was "it the tackler, the manager, or the engine driver? No, it was "the weavers and nobody else; but they could not see the mote "which was in their own eye; but they always said it was "somebody else who was to blame.'

This apathy on the part of the persons most interested in having the law fully carried out has been observed by Mr. Knyvett, H.M. Inspector for Birmingham, who has forwarded to me the following remarks on the subject :—

"It so often appears to be hard to the minds of some critics to believe that factory inspectors, drawn from whatever class (and no class can produce all the attributes for a perfect inspector), have a heart in their work; to believe that inspectors, although the latter pass many hours daily amongst machinery and amongst conditions of life the hardness and sordid monotony of which appear almost unbearable, remain untouched and uninfluenced by these things; that they do not try to get machinery made safe, or to soften, so far as they can, the struggle in factory and workshop life.

"But, as it is with the critics, so is it with the working classes.

"Here in Birmingham, thanks to the interest taken in our work by the present Home Secretary, an office has been provided, where personally I attend at a fixed time to receive complaints, or to give information about the Act; but at present, the working classes make hardly any, if any, use of their opportunity. In the place of my seeing the person who requires my assistance, the usual plan adopted, is for him to send me an anonymous letter, containing insufficient information.

"I have, Sir, written at some length on this point, because I am convinced that my colleagues are, in all the cases I know, interested in their work; that they are a great power for good, in these days of great importance from a Socialist point of view; and that they do not receive enough justice from their critics, or assistance from the operative classes; and to this latter opinion I know that I am fortunate in having the assent of Mr. Burns.

"I desire once again to express my gratitude to the magistrates, the local authorities, and the press in Birmingham, for the courteous assistance invariably shown to me in the execution of my official duties; and, even in a further degree, to the manufacturing and operative classes, for the good feeling which I know to attend the operation of the Factory Act in my district."

The trades unions render us valuable assistance, and I am glad to find that their views agree with my own that the weak link in the chain is the lack of co-operation on the part of the protected persons. I can corroborate this from my own personal experience, as I have often told engineers in the course of my inspection that they rather impede than assist in the fencing of engines and machinery in order to save themselves a little trouble. I have, in fact, experienced greater difficulty with them than with the manufacturers, whom I have generally found ready to comply with reasonable suggestions.

In wet spinning I have found the women reluctant to put up the splash board provided for their benefit, and on going through a hat factory and observing very dangerous cog-wheels on the machines I have remonstrated with the manufacturer, who asked me to look under each machine, upon doing which I found beautifully made wooden covers thrown aside. Machine after machine was found thus unfenced, the workpeople being too indifferent to take the trouble of putting them on.

This shows how important it is in framing special rules to make the employed liable to penalties as well as the occupiers, and it is to be hoped that Clause 9 (1) in the Act of 1891, which enacts—

"If any person who is bound to observe any special rules
" established for any factory or workshop under this Act,
" acts in contravention of, or fails to comply with, any such
" special rule, he shall be liable on summary conviction to a
" fine not exceeding two pounds,"

will have a salutary effect on those for whose protection the factory regulations have been made, but who are thus negligent in availing themselves of their benefit.

I have, &c.,

(Signed) R. E. SPRAGUE ORAM.

The Right Hon.
H. H. Asquith, Q.C., M.P.,
&c. &c. &c.
The Secretary of State, for the
Home Department.

Appendix No. I.

Map of the Districts of H. M. Inspectors.

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APPENDICES.

APPENDIX No. 1 (*see* Map).

APPENDIX No. 2.

HER MAJESTY'S INSPECTORS OF FACTORIES

NAME, DATE OF APPOINTMENT, SALARY, &c.

Her Majesty's Inspectors.				During Year ended 31st October 1893.	
Name.	Date of Appointment to Factory Department.	Salary on 31st October 1893.	Head-Quarters.	No. of Miles travelled.	Amount of Travelling and Personal Expenses.
		£			£ s. d.
H.M. CHIEF INSPECTOR.					
R. E. Sprague Oram	1st July 1861	1,200	Home Office, S.W.	—	—
H.M. SUPERINTENDING INSPECTORS.					
S. W. May	22nd July 1861	*800	Wakefield	8,000	118 4 3
W. D. Cramp	7th March 1868	590	Birmingham	4,763	85 14 7
E. Gould	30th June 1866	570	Home Office, S.W.	7,295	81 8 10
W. O. Meade-King	22nd Sept. 1868	550	Glasgow	5,640	66 16 9
H.M. SUPERINTENDING INSPECTOR OF WORKSHOPS.					
J. B. Lakeman	29th Dec. 1864	*600	8, Finsbury Circus, E.C.	3,772	26 2 3

* Including additional allowance of 100*l*.

NAME, DATE OF APPOINTMENT, SALARY, &c.—*continued.*

Her Majesty's Inspectors.				During year ended 31st October 1893.	
Name.	Date of Appointment to Factory Department.	Salary on 31st October 1893.	Head-Quarters.	No. of Miles travelled.	Amount of Travelling and Personal Expenses.
H.M. INSPECTORS.		£			£ s. d.
G. I. L. Blenkinsopp	30th Dec. 1867	500	Peterborough	10,576	158 3 10
W. H. Johnston	1st January 1868	500	Home Office, S.W.	6,402	114 10 5
J. H. Bignold	14th March 1868	500	Norwich	12,000	225 0 0
C. R. Bowling	8th June 1868	485	Southampton	11,369	175 2 1
E. H. Osborn	20th June 1868	*555	Manchester	5,975	93 8 5
R. W. Cooke Taylor	27th May 1869	455	Coventry	6,797	141 4 11
J. Jones	13th January 1871	440	Plymouth	6,055	161 14 11
W. A. Beaumont	2nd August 1871	440	Bradford	3,410	54 1 1
J. A. Redgrave	1st February 1872	425	Home Office, S.W.	6,404	88 14 1
H. J. Cameron	16th March 1872	425	Home Office, S.W.	1,811	14 16 2
H. W. Kindersley	16th March 1872	[illegible]	Edinburgh	4,999	89 16 8
H. S. Richmond	22nd April 1872	410	Liverpool	4,568	65 8 5
A. G. K. Woodgate	7th May 1872	400	Dublin	19,073	357 11 10
C. C. W. Hoare	1st October 1872	400	Wolverhampton	5,339	84 5 6
J. S. Maitland	2nd June 1873	400	Bristol	5,685	130 5 4

* Including additional allowance of 100*l.*

NAME, DATE OF APPOINTMENT, SALARY, &c.—*continued.*

Her Majesty's Inspectors.				During Year ended 31st October 1893.	
Name.	Date of Appointment to Factory Department.	Salary on 31st October 1893.	Head-Quarters.	No. of Miles travelled.	Amount of Travelling and Personal Expenses.
H.M. INSPECTORS—*cont.*		£			£ s. d.
H. P. Smith	17th June 1875	400	Sheffield	7,430	124 18 4
J. F. Bevan	25th March 1876	400	Nottingham	3,022	36 11 6
S. H. Knyvett	26th Sept. 1877	400	Birmingham	823	12 14 1
A. C. Armstrong	20th March 1878	400	Leicester	1,718	14 12 7
E. M. Roe	16th Feb. 1880	400	Birmingham	1,412	14 5 4
A. P. Vaughan	2nd Sept. 1880	380	Home Office, S.W	1,302	17 16 4
J. D. Prior	21st March 1881	380	Huddersfield	1,937	26 18 1
J. A. Hine	1st Nov. 1881	380	Leeds	5,656	75 18 3
H. M. Robinson	31st Oct. 1882	370	Dundee	13,617	178 7 0
A. Lewis	5th May 1885	360	Swansea	9,056	175 8 0
R. P. Arnold	6th June 1882	360	Worcester	8,027	102 15 0
A. Platt	18th Sept. 1883	330	Burnley	3,757	33 11 7
G. B. Snape	21st Sept. 1883	330	Belfast	4,281	96 7 1
J. Pearson	13th March 1884	330	Rochdale	2,016	42 18 5
J. T. Birtwistle	26th January 1885	330	Blackburn	4,030	52 11 11

NAME, DATE OF APPOINTMENT, SALARY, &c.—*continued.*

Her Majesty's Inspectors.				During Year ended 31st October 1893.	
Name.	Date of Appointment to Factory Department.	Salary on 31st October 1893.	Head-Quarters.	No. of Miles travelled.	Amount of Travelling and Personal Expenses.
H.M. INSPECTORS—*cont.*		£			£ s. d.
R. Tinker	2nd January 1886	320	Bolton	3,320	70 11 0
G. Sedgwick	18th October 1886	320	Walsall	1,573	17 14 0
C. W. Shaw	19th Feb. 1887	310	Manchester	1,526	19 14 0
J. H. Walmsley	17th July 1888	310	Wolstanton, Stoke-on-Trent	3,438	58 6 5
D. Walmsley	14th August 1889	310	Stockport	5,342	72 10 0
J. E. Ashworth	14th August 1889	310	Ashton-under-Lyne	4,007	90 12 8
R. Johnson	17th May 1890	300	Newcastle-on-Tyne	3,975	43 6 7
J. Law	22nd August 1890	300	Preston	10,447	182 2 11
R. E. Graves	18th Sept. 1890	300	Glasgow	4,586	36 12 3
E. T. Dawson	9th March 1887	300	Salford	6,338	80 16 7
H.M. JUNIOR INSPECTORS.					
A. H. Parkinson	26th Feb. 1891	220	Accrington	2,803	26 4 3
J. H. Rogers	6th August 1891	220	Manchester	2,698	81 9 9
G. Bellhouse	6th August 1891	220	Home Office, S.W.	4,693	108 19 8

NAME, DATE of APPOINTMENT, SALARY, &c.—*continued.*

Her Majesty's Inspectors.				During Year ended 31st October 1893.	
Name.	Date of Appointment to Factory Department.	Salary on 31st October 1893.	Head-Quarters.	No. of Miles travelled.	Amount of Travelling and Personal Expenses.
H.M. JUNIOR INSPECTORS—*cont.*		£			£ s. d.
W. Williams	10th March 1892	210	Blackburn	1,919	24 17 2
J. Calder	26th March 1892	210	Glasgow	6,030	107 17 8
O. A. Shinner	18th June 1892	210	Home Office, S.W.	4,058	30 4 7
T. Birtwistle (Examiner of Particulars)	27th June 1892	400	Accrington	9,511	115 2 0
C. F. Wright	Sept. 1892	210	Stourbridge	5,799	90 18 2
C. R. Pendock	Sept. 1892	210	Bristol	4,520	80 2 9
J. Jackson	Sept. 1892	210	Liverpool	5,564	115 5 0
H. J. Wilson	Sept. 1892	210	Leeds	5,626	90 14 11
K. H. Garvie	Sept. 1892	210	Halifax	1,403	16 19 3
W. H. Seal	Nov. 1892	200	Home Office, S.W.	3,873	35 16 7
J. M. Arbuckle	Nov. 1892	200	Home Office, S.W.	1,685	16 0 10
G. A. Taylor	Nov. 1892	200	Limerick	15,983	334 13 6
F. J. Parkes	Nov. 1892	200	Sheffield	3,206	45 16 11
J. E. Harston	Dec. 1892	200	Yeovil	11,639	204 5 2
J. Dodgson	Jan. 1893	200	Sheffield	3,109	40 8 4

NAME, DATE of APPOINTMENT, SALARY, &c.—*continued.*

Her Majesty's Inspectors.				During Year ended 31st October 1893.	
Name.	Date of Appointment to Factory Department.	Salary on 31st October 1893.	Head-Quarters.	No. of Miles travelled.	Amount of Travelling and Personal Expenses.
		£			£ s. d.
H.M. JUNIOR INSPECTORS—*cont.*					
T. O. Edwards	March 1893	200	Cardiff	3,414	48 6 8
J. H. Crabtree	April 1893	200	Birmingham	739	9 4 8
J. Hilditch	June 1893	200	Wrexham	1,374	10 18 1
T. C. Butler	August 1893	200	Glasgow	678	4 10 0
S. Shuter	Sept. 1893	200	Home Office, S.W.	210	1 6 6
FEMALE INSPECTORS.					
Miss M. E. Abraham	May 1893	200	Home Office, S.W.	3,464	65 0 4
Miss M. M. Paterson	May 1893	200	Glasgow	4,270	41 9 1
H.M. INSPECTORS' ASSISTANTS.					
S. Fallows	May 1893	100	8, Finsbury Circus, E.C.	1,021	7 19 8
J. J. Pender	May 1893	100	Belfast	1,521	13 15
J. Burns	May 1893	100	Glasgow	1,223	22 19 0
T. C. Hayward	May 1893	100	8, Finsbury Circus, E.C.	909	7 19 4

NAME, DATE of APPOINTMENT, SALARY, &c.—*continued.*

Her Majesty's Inspectors.				During Year ended 31st October 1893.	
Name.	Date of Appointment to Factory Department.	Salary on 31st October 1893.	Head-Quarters.	No. of Miles travelled.	Amount of Travelling and Personal Expenses.
		£			£ s. d.
H.M. INSPECTORS' ASSISTANTS—*cont.*					
C. E. Whitelaw	May 1893	100	8, Finsbury Circus, E.C.	1,380	13 15 0
T. Davis	May 1893	100	8, Finsbury Circus, E.C.	1,122	11 13 10
T. Brown	May 1893	100	Glasgow	1,331	29 10 9
J. T. Mackie	May 1893	100	8, Finsbury Circus, E.C.	1,103	11 2 5
J. Bineham	May 1893	100	8, Finsbury Circus, E.C.	666	11 12 6
R. A. Goddard	June 1893	100	8, Finsbury Circus, E.C.	659	6 13 10
H. E. Read	July 1893	100	8, Finsbury Circus, E.C.	557	4 6 7
A. M. Thomas	July 1893	100	8, Finsbury Circus, E.C.	754	6 3 2
A. Ballantyne	July 1893	100	Glasgow	642	5 15 6
J. Ryan	Sept. 1893	100	Cork	—	—
R. G. Broadhead	Nov. 1893	100	8, Finsbury Circus, E.C.	—	—

APPENDIX No. 3.

NAME and DESCRIPTION of DISTRICT together with the PRINCIPAL INDUSTRIES and the NUMBER of FACTORIES and WORKSHOPS in each.

Number of District corresponding with Map.	Name and Description of District.	Principal Industries.	Number of Factories Registered.	Number of Workshops Registered.
1	DUNDEE DISTRICT.—Counties of Forfar, Perth, part of Fife, and North of Scotland.	Jute, flax, wool, paper, linoleum.—Granite polishing, engineering.	1,701	1,043
2	GLASGOW DISTRICT.—Counties of Lanark, Renfrew, Ayr, Dumfries, Kirkcudbright, Wigton, Argyle, and part of Stirling.	Iron, cotton, wool, silk, jute, hair, carpets, rope, and sails.—Shipbuilding, engineering, foundries, calico printing, dyeing, sewing thread.	4,055	4,197
3	EDINBURGH DISTRICT.—Counties of Edinburgh, Linlithgow, Clackmannan, Kinross, Haddington, Berwick, Peebles, Selkirk, Roxburgh, and parts of Stirling and Fife.	Glass, cotton, wool, carpets, gunpowder, silk, paraffin oil.—Letterpress printing, bookbinding, engineering.	1,110	1,460
4	BELFAST DISTRICT.—Counties of Antrim, Londonderry, Down, part of North Donegal.	Flax, cotton, rope.—Making shirts, collars and cuffs, and handkerchiefs.—Shipbuilding.	1,496	1,409
5	DUBLIN DISTRICT.—All Ireland south of the preceding District	Flax, jute, wool, army clothing, butter, condensed milk.—Breweries, distilleries.	2,660	1,910
6	NORTH-EAST OF ENGLAND DISTRICT.—Counties of Durham, Northumberland, and North Yorkshire.	Iron, glass, white-lead, chemicals, hemp and wire rope, manures.—Shipbuilding, engineering, shot making.	1,724	1,401
7	NORTH-WEST OF ENGLAND DISTRICT.—Preston, North Lancashire, Settle, Hawes, Westmoreland, and Cumberland.	Cotton, wool, iron, lead-pencils, bobbins, gunpowder.—Shipbuilding, engineering.	1,571	1,308
8	BLACKBURN DISTRICT.—Blackburn, Darwen, Church, Accrington, Whalley, Clitheroe, Haslingden, Ramsbottom, Rishton.	Cotton, wool.—Engineering, bleaching, and calico printing	1,004	585
9	LEEDS DISTRICT.—Leeds, Morley, Pudsey, Yeadon, Selby, Hull, Beverley, Scarborough, Stanningley, Thirsk, York, Ripon, Harrogate, Otley, Guiseley, Whitby.	Cotton, wool, iron, ready-made clothing.—Engineering, locomotive, and carriage works, shipbuilding.	2,594	2,114
10	BRADFORD DISTRICT.—Bradford, Wakefield, Dewsbury, Pontefract, Batley, Normanton, Goole, Shipley, and Saltaire.	Cotton, wool, worsted, carpets, mungo, and shoddy, iron.—Engineering, woollen printing, rag-grinding.	2,200	935

NAME and DESCRIPTION of DISTRICT together with the PRINCIPAL INDUSTRIES and the NUMBER of FACTORIES and WORKSHOPS in each—*continued.*

Number of District corresponding with Map.	Name and Description of District.	Principal Industries.	Number of Factories Registered.	Number of Workshops Registered.
11	HUDDERSFIELD DISTRICT.—Huddersfield, The Colne Valley, Meltham, Honley and Brockholes, Holmfirth and District, Denby Dale and District, Shepley and Shelley, Kirkheaton and Kirkburton, Halifax, Lightcliffe, Brighouse, Elland, West Vale and Stainland, Sowerby Bridge, The Ripponden Valley, and Mirfield,	Wool, worsted, cotton, aniline dyes.—Engineering, cloth dyeing, stone planing, calico-printing.	2,122	2,185
12	BURNLEY DISTRICT.—Burnley, Nelson, Colne, Todmorden, Hebden Bridge, Padiham, Great Harwood, Barnoldswick and Earby, Bingley, Skipton, and Keighley.	Cotton, ready-made clothing.—Engineering, fustian cutting, bobbin making.	1,475	664
[illegible]	ROCHDALE DISTRICT.—Rochdale, Shaw, Royton, Bacup, Bury, East Side of Oldham, Heywood, Rawtenstall, and the Rossendale Valley.	Cotton, wool, silk, paper, felt hats, felt carpets, slippers.—Engineering, fustian cutting, bleach works, calico printing.	1,403	653
14	SALFORD DISTRICT.—Salford, Pendleton, Eccles, Patricroft, Swinton, Pendlebury, Walkden, Radcliffe, Whitefield, Prestwich, Middleton, West Side of Oldham, including Hollinwood, Failsworth, and Lees.	Cotton, paper, silk, iron, wool and worsted.—Engineering, fustian cutting, bleaching, calico printing.	1,078	533
15	MANCHESTER DISTRICT.—Manchester, Stretford, Altrincham, Warrington, Cadishead, Lymm, Knutsford, Northwich, Sale, Irlam.	Cotton, clothing of all kinds, salt, chemicals, white-lead.—Engineering, fustian cutting, bleaching, dyeing, calico print works.	2,611	3,212
16	BOLTON DISTRICT.—Bolton, Wigan, Farnworth, Atherton, Tyldesley, Leigh, Bedford-Leigh, West-Leigh, Westhoughton, Hindley, Ince, Horwich, Newton-le-Willows, Earlstown, Golborne, Ormskirk, Rufford, and Southport.	Cotton, hosiery.—Engineering, bleaching, dyeing	1,257	1,297
17	LIVERPOOL DISTRICT.—Liverpool, Prescot, Runcorn, St. Helens, Birkenhead, Chester, Counties of Flint, Denbigh, Merioneth, Carnarvon, Montgomery and Anglesea.	Glass, rope, chemicals, white and red lead, slates.—Engineering, shipbuilding, seed crushing, corn and rice mills.	2,373	3,369
18	ASHTON-UNDER-LYNE DISTRICT.—Ashton, Dukinfield, Audenshaw, Droylsden, Bardsley, Hurst, Stalybridge, Mossley (Upper and Lower), Micklehurst, Saddleworth, Greenfield, Upper Mill, Diggle, Dobcross, Delph, Glossop, Hadfield, Dinting, Mottram, Marple, New Mills, Hayfield, Chapel-en-le-Frith.	Cotton, wool, hats, chemicals.—Engineering, bleaching, calico printing.	675	453

NAME and DESCRIPTION of DISTRICT together with the PRINCIPAL INDUSTRIES and the NUMBER of FACTORIES and WORKSHOPS in each—*continued*.

Number of District corresponding with Map.	Name and Description of District.	Principal Industries.	Number of Factories Registered.	Number of Workshops Registered.
19	STOCKPORT DISTRICT.—Stockport, Macclesfield, Bollington, Hyde, Sandbach, Denton, Crewe, Winsford, Nantwich, Middlewich, Buxton, Peak Forest, Millers Dale, Doveholes, Bakewell.	Cotton, hats, silk, clothing, salt, chemicals. — Engineering, locomotive works, fustian cutting.	909	501
20	SHEFFIELD DISTRICT.—Sheffield, Barnsley, Chesterfield, Retford, Doncaster, Gainsborough, Grimsby, Rotherham, Chapeltown and Ecclesfield, Eckington, The Loxley and Rivelin Valleys, Stannington, Wadsley, Oughtibridge, Penistone, Castleton, and North Lincolnshire.	Glass, electro-plate, cutlery, iron, ropes, stoves, sails, netting, chemicals.—Engineering, fish-curing.	5,551	2,377
21	NOTTINGHAM DISTRICT.—Central and South Nottinghamshire, Mid-Lincolnshire and the towns of Alfreton and Ilkeston in Derbyshire.	Lace, hosiery, bicycles, chemicals, clothing, iron.—Engineering, cotton doubling.	1,508	1,315
22	LEICESTER DISTRICT.—The County of Leicester and the following towns, Melbourne, Derby, Duffield, Belper, Ripley, Ambergate, Wirksworth and Matlock Bath in Derbyshire.	Boots, elastic-web, hosiery, silk, iron, china, ribbons.—Engineering, bleach works.	1,288	611
23	STOKE-ON-TRENT DISTRICT.—The Potteries and North Staffordshire, Newport and Market Drayton in Shropshire and Ashbourne in Derbyshire.	China, earthenware, silk, boots.—Breweries	1,470	1,419
24	WALSALL DISTRICT.—Walsall, Bilston, Cannock, Darlaston, Lichfield, Oldbury, Smethwick, Tipton, Wednesbury, West Bromwich, Pellsall and Aldridge, Rugeley, Lichfield, and Sedgley.	Iron, hollow-ware, nails, cutlery, chain.—Engineering	1,142	1,365
25	WOLVERHAMPTON DISTRICT.—Wolverhampton, Dudley, Stourbridge, Bridgenorth, Shrewsbury, Oswestry, Willenhall, Deepfields, Brierley Hill, Old Hill, and Halesowen.	Iron, chain, hollow-ware, anchors, nails, clothing, boots.—Engineering, enamelling iron plates.	1,587	4,025
26	COVENTRY DISTRICT.—Coventry, Rugby, Leamington, Nuneaton, Northampton, Oxford, Banbury, Witney, and portions of Buckinghamshire and Gloucestershire.	Silk, elastic web, felt hats, hosiery, boots, gloves, clothing, cycles.	1,408	1,620
27	BIRMINGHAM No. 1 DISTRICT.—East side of Birmingham and part of Warwickshire, Stratford-on-Avon, Studley, Alcester, Redditch, and some villages in Worcestershire.	Glass, cycles, saddlery, cutlery, toys, railway carriages and waggons.—Brass casting and finishing, gunmaking, button-making, enamelling of iron plates.	1,906	2,290

NAME and DESCRIPTION of DISTRICT together with the PRINCIPAL INDUSTRIES and the NUMBER of FACTORIES and WORKSHOPS in each—*continued.*

Number of District corresponding with Map.	Name and Description of District.	Principal Industries.	Number of Factorie Registered.	Number of Workshops Registered.
28	BIRMINGHAM No. 2 DISTRICT.—West side of Birmingham, Tamworth, Handsworth, Warwick, Meriden, Solihull, Coleshill, and Sutton Coldfield.	Glass, iron, bolts, nuts, screws and nails, iron bedsteads, toys, jewellery, silver plate, electro-plate, pins, steel pens, cycles.—Engineering, coining, tool making, button making.	1,139	1,626
29	WORCESTER DISTRICT. — The Counties of Worcester and Hereford Ludlow, Church Stretton, Gloucester, Winchcomb, Cheltenham, Wotton-under-Edge, Stroud, Painswick, Nailsworth, Berkeley, Dursley, Forest of Dean, Stow-on-the-Wold, Tewkesbury, Newent, Cirencester.	China and porcelain, salt, iron, wool, carpets, silk, gloves, pins, ready-made clothes.—Fruit pressing.	1,261	1,499
30	SWANSEA DISTRICT.—The Counties of Monmouth, Glamorgan, Carmarthen, Pembroke, Brecon, Cardigan; and Radnorshire.	Iron and tin-plates, patent fuel, slates.—Lead and silver-ore dressing, copper smelting, engineering, shipbuilding.	2,271	1,897
31	PETERBOROUGH DISTRICT.—The Counties of Bedford, Huntingdon, North of Northamptonshire, Rutland, and Southern part of Lincolnshire.	Iron, agricultural implements, malt, boots and shoes, straw hats.	1,067	3,322
32	NORWICH DISTRICT.—The Counties of Norfolk and Suffolk, Colchester, Kelvedon, St. Ives, Cambridge, Ely, March, and Wisbech.	Boots and shoes, clothing, silk crape, manures.—Breweries, fish-curing, fruit preserving.	1,948	1,856
33	THE EAST METROPOLITAN DISTRICT.—The Metropolis east of Mile End Road, thence to Chelmsford, northward to Buntingford, Hertford, and Bishops Stortford; thence east and south-east to Salcot in Essex.	Glass, chemicals, rope, confectionery and preserves, tobacco, malt, white-lead, paints and colours, india-rubber, lucifer matches, manures, small-arms, gunpowder.—Engineering, shipbuilding, telegraph works.	1,619	898
34	THE CENTRAL METROPOLITAN DISTRICT.—The Metropolis east of Farringdon Road to Wapping; then northward to Cambridge Heath, Stamford Hill; thence to Barnet, Hatfield, Watford, Rickmansworth, Tring, West Hertfordshire and Middlesex to Willesden; thence to Farringdon Road.	Boots, clothing, umbrellas, straw-hats, organs and pianos, white-lead, tobacco, envelopes and stationery.—Engineering, paper staining, letter-press printing, lithography, book-binding cabinet making.	2,644	328
35	THE WEST METROPOLITAN DISTRICT.—The Metropolis west of Farringdon Road, with the chief part of Bucks, and parts of Middlesex, Berks, and Oxfordshire.	Pianos, clothing, paper, wood-ware, gunpowder.—Letter-press printing, lithography, book-binding, engineering, paper staining, diamond cutting, furniture making, iron founding, electrical engineering, brick-making, glass-blowing, chair making.	2,611	394

NAME and DESCRIPTION of DISTRICT together with the PRINCIPAL INDUSTRIES and the NUMBER of FACTORIES and WORKSHOPS in each—*continued.*

Number of District corresponding with Map.	Name and Description of District.	Principal Industries.	Number of Factories Registered.	Number of Workshops Registered.
36	BRISTOL DISTRICT.—Bristol, Bath, the greater part of Somersetshire, and Northern parts of Wiltshire and Berkshire.	Clothing, stays, wool, hair, silk, boots, paper.—Brick-making, locomotives and rolling stock, bacon curing.	1,943	3,314
37	THE SOUTH METROPOLITAN DISTRICT.—The Counties of Surrey Kent, and Sussex.	Clothing, rabbit skin fur, cement, paper, linoleum, biscuits,—Engineering, brick-making, fruit preserving, the Royal Dockyards and Arsenals, telegraph works,	3,285	2,207
38	SOUTHAMPTON DISTRICT.—Counties of Hants, Dorset, Isle of Wight, southern parts of Wilts, Somerset, and Berkshire, and the towns of Cullompton Topsham, Exmouth, Sidmouth, Colyton, and Honiton in Devonshire.	Flax, ropes, nets, lace, biscuits, gloves, corsets, boots.—Engineering, brick-making, breweries, railway carriage works, bacon curing, ship and yacht building, stone mills, quarries, the Royal Dockyard.	2,405	7,452
39	PLYMOUTH DISTRICT.—County of Cornwall and all Devon except that portion lying east and north-east of Exeter.	Biscuits, paper, lace, boots, gloves, wool, tin streams.—Ship-building, the Royal Dockyards.	1,248	2,328
—	H.M. Superintending Inspector of Workshops for the County of London	- - - - - -	—	15,543
—	H.M. Inspector in charge of the Cotton Cloth District of Lancashire, Yorkshire, and Cheshire.	- - - - - -	740	—

Appendix No. 4.

Return of Prosecutions for Offences against the Factory and Workshop Acts, 1878 to 1891, in the Year ended 31st October 1893.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1892.			*In the Dundee District.*	£ s. d.	£ s. d.	
Nov. 16	David Yule, flax and hemp spinner, Abbotshall Mill, Kirkcaldy.	Sheriff Gillespie, Sheriff Court, Kirkcaldy.	Employing five young persons under 16 years of age without certificates of fitness.	2 0 0	0 13 6	
" 18	James Headrick, rope spinner, Hilltown, Dundee.	Sheriff Campbell-Smith, Sheriff Court, Dundee.	Employing two children without school attendance certificates.	0 2 0	0 15 6	
Dec. 2	William Johnston, labourer, 112, Cowgate, Dundee.	" "	Allowing his child, Robert, to work full time in a factory.	0 1 0	0 12 0	Employment obtained by personating his elder brother.
" 21	John O. Black, baker, 10, Hawkhill, Dundee.	" "	Employing two male young persons under 16 before 6 a.m. in his bakehouse on 2nd December 1892.	0 2 6	0 12 6	In inflicting his usual penalty of 2*s.* 6*d.*, the sheriff remarked that he fined respectable folks 2*s.* 6*d.* and poor people 1*s.* It does not seem to matter what the offence is.
1893. Jan. 11	Alex. N. Simpson, tow spinner, Auchinblae.	Sheriff Robertson, Sheriff Court, Stonehaven.	Failing to give notice of commencing to occupy a factory, and employing two children full time.	0 5 0	0 15 0	As this was the first case I have had in this court, I did not press it.
Feb. 24	Francis East, Maryfield Chair Factory, Dundee, chair manufacturer.	Sheriff Campbell-Smith, Sheriff Court, Dundee.	Failing to affix Abstract of Act in factory, and employing a boy under 16 without certificate of fitness.	0 1 0	0 12 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Dundee District*—cont.	£ s. d.	£ s. d.	
Apr. 18	Mary Ann Moore, mill-worker, Lochee, Dundee.	Sheriff Campbell-Smith, Sheriff Court, Dundee.	Allowing her child, Annie, age 12, to be employed full time in a factory.	- -	0 14 0	Employment was obtained by personation. When the case was called the accused did not appear; after proving service of the complaint I obtained a warrant to apprehend her. I have learnt, however, that she has left the district with her family, to avoid arrest. It is probable she will not return, as I understand there is a warrant out for her husband's arrest.
June 21	James Couttie & Sons, biscuit manufacturers, Morgan Works, Dundee.	„ „	Employing a boy under 16 without a certificate of fitness.	0 2 6	0 14 6	
Aug. 2	James Spence & Co., drapers, &c., Reform Street, Dundee.	„ „	Employing one young person and seven women in dressmaking at 5.30 p.m. on Saturday, 24th June.	0 7 6	0 18 0	
„	Forbes and Christie, calenderers and sack makers, Victoria Road, Dundee.	„ „	Employing a child full time on and previous to 3rd July.	0 1 0	0 15 0	
„ 24	P. McLeod & Co., printers, "Highland News" Office, Inverness.	Sheriff Blair, Sheriff Court, Inverness.	Employing a child full time - - -	0 12 6	0 16 0	
Oct. 6	Alex. Milne and Sons, provision preservers, Wales Street, Aberdeen.	Sheriff Robertson, Sheriff Court, Aberdeen.	Employing six women at 9.50 p.m. on 11th August 1893.	6 0 0	0 17 6	
„ 11	Mary Connor, mill-worker, 1, Hunter Street, Dundee.	Sheriff Campbell-Smith, Sheriff Court, Dundee.	Allowing her child to work full time in a factory.	0 0 6	0 12 0	Employment was obtained by personation.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Glasgow District.	£ s. d.	£ s. d.	
1892						
Nov. 21	Wm. Peacock, rope maker, Brediland, Paisley.	Sheriff Cowan, Paisley	Employing a child without entering in Register	2 0 0	} 0 10 6	
"	" "	" "	Employing a child without certificate of fitness.	1 10 0		
"	" "	" "	Employing a child without school certificate	1 10 0		
" 25	Robertson, Jas. & Co. paper manufacturers, Cartbridge, Pollokshaws.	" "	Employing four women on statutory holiday	0 5 0	1 7 6	
Dec. 15	John Barr, wood turner, Moss Vale, Paisley.	" "	Employing a child without a school certificate	0 10 0	0 16 0	
1893.						
Jan. 11	Wm. Beardmore & Co., engineers, Parkhead, Glasgow.	Sheriff Birnie, Glasgow	Neglecting to fence four engines	2 0 0	0 13 8	
"	John Campbell & Co., silk mills, Hozier Street, Glasgow.	" "	Employing two young persons more than seven days without certificates of fitness.	0 5 0	0 10 8	
"	Michael Boyle, manager	" "	Knowingly making use of a false date of employment of a young person.	2 0 0	0 10 8	
"	Barrowfield Cotton Spinning Co., French Street, Glasgow.	" "	Neglecting to limewash factory for more than 14 months.	0 5 0	0 10 8	
"	Donald and McCulloch, cotton weavers, Helen Street, Govan.	" "	Employing four women after 6 p.m., viz., at 7.45 p.m.	1 0 0	0 15 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Glasgow District*—cont.	£ s. d.	£ s. d.	
Jan. 11	John C. Wilson & Co., brass founders, Portugal Street, Glasgow.	Sheriff Birnie, Glasgow	Employing two young persons more than seven days without certificates of fitness.	1 0 0	0 9 10	
" 13	John E. Welsh & Co., ship model makers, Hyde Park Street, Glasgow.	" "	Neglecting to give notice of commencing to occupy a workshop within one month.	0 5 0	0 10 8	
Feb. 14	Peter Browne, baker, 73, Main Street, Wishaw.	Sheriff Substitute Davidson, Hamilton.	Employing a young person without registering or certifying.	0 10 0	0 12 0	
" 28	Peter Grant, baker, Bridge End, Rothesay.	Sheriff Martin, Rothesay	Employing two young persons under 16 before 6 a.m., viz., at 5.25 a.m.	1 0 0	0 7 0	
Mar. 14	R. McKinlay & Co., silk finishers, &c., Bwinfoot, Lochwinnoch.	Sheriff Cowan, Paisley	Employing two children and two young persons without entering in Register.	2 0 0	0 18 6 (for both charges)	
"	" "	" "	Employing two children and two young persons without certificates of fitness.	4 0 0		
" 16	Buchanan and French, Albert Saw Mills, Renfrew.	" "	Employing three young persons without entering in Register.	1 0 0	0 17 0 (for both charges)	
"	" "	" "	Employing three young persons without certificates of fitness.	1 10 0		
" 17	Jas. Pyle & Co., copper works, 40, Morrison Street, Glasgow.	Sheriff Birnie, Glasgow	Employing four young persons after 6 p.m., viz., at 9.55 p.m.	2 0 0	0 13 10	
"	Mary McEwen, weaver, employed at T. K. Kerr & Co's. factory, Springfield Road, Glasgow.	" "	Working during meal hour without the knowledge, consent, or connivance of her employers and against their orders, 7th February 1893. (Test case under section 87.)	0 1 0	0 10 8	The Sheriff imposed the nominal penalty of 1s. and 4s. costs on the defendant who pleaded guilty.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Glasgow District*—cont.	£ s. d.	£ s. d.	
April 28	Jeannie Paterson, weaver	Sheriff Birnie, Glasgow	Working during meal hour, contrary to employer's orders, &c.	0 2 6	0 6 10	This was a test case, the woman Paterson pleading not guilty and being represented by solicitor. Sheriff considered case proved, and fined her 2*s.* 6*d.*, the balance of costs to be paid by department. In other cases all pleaded guilty and were fined similarly, 2*s.* 6*d.*
"	Elizth. McClelland, weaver	" "	Working during meal hour, contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Eliz. Thompson, piecer	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Eliz. McEwen, piecer	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Isabella Walker, piecer	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Eliz. Muir, piecer	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Eliz. McDougal, piecer	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Mary Pritchard, weaver	" "	Working during meal hour contrary to employer's orders &c.	0 2 6	0 4 4	
"	Mary A. McGrath, weaver	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Margaret Rodgers, weaver	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Ann Bell, weaver	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Eliz. Hamilton, weaver	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Glasgow District*—cont.	£ s. d.	£ s. d.	
April 28	Margaret Faichney, weaver	Sheriff Birnie, Glasgow	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	This was a test case, the woman Paterson pleading not guilty and being represented by solicitor. Sheriff considered case proved, and fined her 2s. 6d., the balance of costs to be paid by department. In other cases all pleaded guilty and were fined similarly, 2s. 6d.
"	Esther Robertson, weaver	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Eliz. Calder, weaver	" "	Working during meal hour contrary to employer's orders, &c.	0 2 6	0 4 4	
"	Agnes Bryden, weaver	" "	Working during meal hour contrary to employer's orders, &c.	-	0 4 4	Withdrawn.
"	R. and J. F. Alexander & Co.	" "	Employing two females during meal hour	-	0 6 4	Sheriff Birnie reserved judgment for a week, when he dismissed both cases, holding the firms had used reasonable precaution.
"	A. Mitchell & Co.	" "	Employing three females during meal hour	-	0 8 2	
"	Mary McEwen	" "	Working during meal hours contrary to orders.	0 5 0	0 4 2	Costs paid by department.
"	Riddell, Wm., wire worker, Springfield Road, Glasgow.	" "	Employing a young person at 7.45 p.m.	1 0 0	0 11 8	
"	Law, Jno., & Co., bakers, Springburn Road, Glasgow.	" "	Employing a young person at 4.35 a.m.	1 0 0	0 14 8	
"	Cayzer, Irvine, & Co., engineers, Finnieston Street, Glasgow.	" "	Employing a young person, age 14, all night, viz., from 6 a.m. on 16th to 1 p.m. on 18th, *i.e.*, 31 hours.	5 0 0	0 10 10	
"	" "	" "	Employing a young person at 8.30 p.m.	1 0 0	0 10 10	

Return of Prosecutions—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1893.			*In the Glasgow District—cont.*	£ s. d.	£ s. d.	
April 28	Maggie Hart, dressmaker, 24, Carlton Place, Glasgow.	Sheriff Birnie, Glasgow	Employing two females at 4.25 p.m.	0 10 0	0 12 10	
May 3	W. G. McAulay, baker, The Vennel, Greenock.	Sheriff J. Henderson Begg, Sheriff Court, Greenock.	Employing a child and a young person under 16 years of age before 6 o'clock in the morning, to wit, at 5.45 a.m.	0 10 0	0 9 8	
" 5	Alexander Mitchell, jr., of A. Mitchell, jr., and Sons, cotton weavers, Rockvilla, Glasgow.	Sheriff Birnie, Glasgow	Allowing three females to clean looms in meal time on 3rd March 1893.	—	—	Dismissed.
"	Robert Orr, of R. T. and J. Alexander & Co., Limited, cotton spinners, 100, Duke Street, Glasgow.	" "	Allowing two females to oil spindles of mules in meal time on 1st March 1893.	—	—	
" 10	Jas. Smith, tobacco manufacturer, Croft Street, Kilmarnock.	Sheriff Hall, Sheriff Court, Kilmarnock.	Employing a child without school attendance certificate for week preceding 2nd March 1893.	0 5 0	0 9 6	
"	David Ligat and Sons, cotton weavers, Newmilns.	" "	Employing two children without school attendance certificate for week preceding 27th January 1893.	0 10 0	0 14 6	
"	" "	" "	Neglecting to limewash factory within 14 months.	1 0 0		
"	John Fleming & Co., lace manufacturers, Kilmarnock.	" "	Employing four young persons for more than seven days without certificate of fitness.	-	0 16 0	This case was dismissed on account of the complaint not being relevant. I asked the sheriff to allow me to amend the complaint, but he refused, and dismissed the case. The defendants' lawyer claimed expenses, and the sheriff allowed him 5*s*. I had to pay costs, in all 16*s*.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Glasgow District*—cont.	£ s. d.	£ s. d.	
May 12	R. and W. Callander, bobbin manufacturers, Minnigaff, Newton-Stewart.	Sheriff W. D. Lyell, Sheriff Court, Kirkcudbright.	Employing a child without school attendance certificate.	0 1 0	0 11 3	
" 16	Robinson and Son, grain millers, Annan.	Sheriff Campion, Sheriff Court, Dumfries.	Neglecting to fence a steam engine	1 0 0	0 7 0	
"	Dinwiddie & Co., hosiery manufacturers, Dumfries.	" "	Employing two young persons for more than seven days without certificates of fitness.	1 0 0	0 7 0	
"	J. and D. McGeorge, hosiery manufacturers, Dumfries.	" "	Employing two young persons for more than seven days without certificates of fitness.	1 0 0	0 7 0	
June 12	John Dunlop, baker, Forth, viâ Lanark.	Sheriff M. D. Davidson, Lanark.	Employing a young person before 6 a.m., viz., 5.35 a.m.	1 0 0	0 6 6	
" 13	R. Graham and Sons, bakers, Main Street, Gorbals, Glasgow.	Sheriff Birnie, Glasgow	Employing a young person before 5 a.m., viz., at 3.15 a.m.	0 10 6	0 13 10	
"	R. A. Peacock and Sons, bakers, Albert Cross, Pollokshields, Glasgow.	" "	Employing a young person before 5 a.m., viz., at 4.50 a.m.	0 10 6	0 11 8	
"	Kinning Park Co-operative Society, Limited, 14, Ardgowan Street, Kinning Park, Glasgow.	" "	Employing nine females after 4 p.m. on Wednesday (day substituted for Saturday), viz., at 6 p.m.	2 5 0	0 10 8	
May 2, adjourned to June 20.	Jessie Anderson, weaver, at Wm. Craig and Son, Barrhead.	Sheriff Cowan, Paisley	Working during meal hour contrary to the employers' orders.	-	0 9 6	This case was adjourned, the sheriff not considering evidence sufficient, and under the circumstances Mr. Gould thought it best to withdraw the case and pay the costs, which I did.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Glasgow District*—cont.	£ *s.* *d.*	£ *s.* *d.*	
June 26	John Bow, baker, Hamilton Street, Carluke.	Sheriff Davidson, Lanark -	Employing two young persons before 5 a.m., viz., at 4 15 a.m.	1 0 0	0 11 6	
July 4	Parlane and Kerr, dress-makers, &c., 10, High Street, Paisley.	Sheriff Cowan, Paisley - -	Employing three women after 8 p.m., viz., at 8.30 p.m., without having forwarded the overtime voucher or entered the date on the record.	2 0 0	0 12 0	
,, 7	Ed. Cardy & Co., finishers, McPhail Street, Glasgow.	Sheriff Birnie, Glasgow -	Employing three women after 6 p.m., viz., 8.7 p.m.	1 10 0	0 9 10	
,,	Simpson, Hunter, and Young, dressmakers, &c., Buchanan Street, Glasgow.	,, ,,	Employing two women after 4 p.m., viz., at 4.25 p.m.	1 0 0	0 9 0	
,,	Helen Westwood, dressmaker, 144, Great Hamilton Street, Glasgow.	,, ,,	Employing three women after 4 p.m., viz., at 4.35 p.m.	0 10 0	0 9 10	
,, 1[illegible]	Martin Ellinger, Print Works, Dalmuir.	Sheriff Gebbie, Dumbarton -	Employing six young persons after 6 p.m., viz., at 10 p.m.	6 0 0	0 17 0	
Aug. 7	Jane Byrne, dressmaker, 266, Sauchiehall, Glasgow.	Sheriff Birnie, Glasgow - -	Employing five women after 8 p.m., viz., 8.30 p.m., and no voucher sent or record filled in.	0 12 6	0 12 4	
,,	Mary Wiley, dressmaker, 513, Gallowgate, Glasgow.	,, ,,	Employing four women after 4 p.m., viz., 6.40 p.m.	0 10 0	0 17 4	
,, 17	Paisley Manufacturing Co-operative Society, Limited, dressmakers, Causeyside, Paisley.	Sheriff Martin, Paisley -	Employing two females from 3 p.m. to 9.15 p.m. without half-an-hour for meals, and after 8 p.m., without having sent voucher, &c., 24th June.	4 4 4	0 15 8	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Glasgow District*—cont.	£ s. d.	£ s. d.	
Aug. 17	Paisley Manufacturing Co-operative Society, Limited, dressmakers, Causeyside, Paisley.	Sheriff Martin, Paisley	Employing two females from 3 p.m. to 9.15 p.m. without half-an-hour for meals, and after 8 p.m., without having sent voucher, &c., 1st July.	-	0 16 4	
Aug. 17	Blake and Davidson, cotton weavers, Brook Street, Glasgow.	Sheriff Birnie, Glasgow	Employing six young persons without certificates of fitness, on Tuesday 8th August 1893.	3 0 0	0 13 4	
"	George Mills & Co., wire cloth makers, 94, Dale Street, Bridgeton, Glasgow.	" "	Employing three young persons after 6 p.m., to wit, at 11.0 p.m. on Tuesday 8th August 1893.	4 10 0	0 11 10	
Oct. 6	William Chalmers, dressmaker, 44, George Street, Oban.	Sheriff Colin Hugh Maclachlan, Sheriff Court, Oban.	Employing two women, on July 11th 1893, at 8.45 p.m., and employing two women for more than five hours, without an interval of half-an-hour for a meal.	0 5 0	0 8 0	The offences were not treated separately by the Sheriff.
" 19	John Lean and Son, cotton weavers, 144, Reid Street, Bridgeton, Glasgow.	Sheriff Birnie, County Buildings, Glasgow.	Employing eight women before 6 a.m., to wit, at 5.7 a.m.	8 0 0	0 14 4	
1892.			*In the Edinburgh District.*			
Dec. 19	Edinburgh Co-operative Printing Company, letterpress printers, 6A, Bristo Place, Edinburgh.	Hubert Hamilton, Esq., Sheriff Substitute of The Lothians and Peebles, Sheriff Court, Edinburgh.	Employing ten women from 8 p.m. till midnight on 29th November 1892.	2 10 0	1 0 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Edinburgh District*—cont.	£ s. d.	£ s. d.	
Jan. 13	Cochrane, Smith, & Co., woollen manufacturers, Cheviot Mills, Selkirk.	E. E. Harper, Esq., Sheriff Substitute for the county of Selkirk, Sheriff Court, Selkirk.	Employing a young person after 6 p.m. on 13th December 1892.	0 10 0	0 15 0	
"	Brown and Clarke, woollen manufacturers, Ettrick Mills, Selkirk.	" "	Employing a young person after 6 p.m. on 13th December 1892.	0 10 0	0 15 0	
"	Boyd and Robertson, woollen manufacturers, Tweed Mills, Selkirk.	" "	Employing nine women from 6 a.m. till 9 p.m. on 12th December 1892.	4 10 0	0 15 0	This firm was convicted of a similar offence on the 14th August 1888.
Feb. 10	Annie Boe, dressmaker, 15, Maitland Street, Edinburgh.	Andrew Rutherford, Esq., Sheriff Substitute, Edinburgh.	Employing three women and three young persons at 4.30 p.m. on Saturday 21st January 1893.	1 0 0	1 0 6	
Apr. 5	Larbert Co-operative Society, bakers, Larbert.	W. G. Scott Moncrieff, Sheriff Substitute of Stirlingshire, Sheriff Court, Falkirk.	Employing a boy under 16 at 4.30 a.m. on 18th March 1893.	0 3 0	0 19 6	
"	Robert Mathieson, baker, 70, High Street, Falkirk.	" "	Employing a boy under 18 at 3.30 a.m. on 11th March 1893.	0 3 0	0 18 0	
"	" "	" "	Employing a boy under 18 at 3 a.m. on 18th March 1893.	0 3 0	0 18 0	
"	" "	" "	Employing two boys under 16 before 6 a.m. on 23rd March 1893.	0 3 0	0 18 0	
" 19	John Corstorphine, baker, 79, Junction Street, Leith.	T. H. Orphoot, Sheriff Substitute, Sheriff Court, Edinburgh.	Employing a boy (16) at 1.30 a.m. on Friday 31st March 1893.	0 10 0	1 1 6	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Edinburgh District*—cont.	£ s. d.	£ s. d.	
April 19	David Cairncross, baker, 217, Leith Walk, Leith.	T. H. Orphoot, Esq., Sheriff Substitute, Sheriff Court, Edinburgh.	Employing a boy (14) at 4.50 a.m. on Saturday 1st April 1893.	0 10 0	1 1 6	
"	Christina M'Clellan, baker, 10, Cowper Street, Leith.	" "	Employing a boy (14) at 4.30 a.m. on Saturday 1st April 1893.	0 5 0	1 1 6	
July 17	James Dunbar, aerated water manufacturer, 14, Maryfield, Edinburgh.	Andrew Rutherford, Esq., Sheriff Substitute, Sheriff Court, Edinburgh.	Employing four women and two young persons from about 5 a.m. to about 10.45 p.m. on Monday 19th June 1893.	3 0 0	1 0 0	
"	" "	" "	Failing to keep the Abstract of the Act affixed in the factory.	- -	1 0 0	Admonished.
Oct. 6	John Hay, baker, 29, Crichton Place, Edinburgh.	"	Employing a boy (13) at 5.33 a.m. on 5th August 1893.	- -	0 15 0	Admonished.
"	J. H. MacAdam, baker, 95, Leith Street, Edinburgh.	" "	Employing a boy (15) at 5.30 a.m. on 2nd September 1893.	- -	0 15 0	Admonished.
"	John Rumage and Son, bakers, 4, Albert Place, Edinburgh.	" "	Employing a boy (14) at 5.45 a.m. on 9th September 1893.	- -	0 15 0	Admonished.
1892.			*In the Belfast District.*			
Dec. 27	Shaw & Co., Limited, candle manufacturers, Mountpottinger Road, Belfast.	R. F. MacCarthy, R.M., E. W. Pimon, Wakefield Dickson, Esqs., Belfast Police Court.	Having on Tuesday, November 29th, 1892, employed five women and two young persons after the hour of seven of the clock at night, to wit, until 10.30 p.m.	1 15 0	0 12 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Belfast District*—cont.	£ s. d.	£ s. d.	
Jan 24	Jas. A. Thompson & Co., handkerchief manufacturers, Brewery Buildings, Belfast.	F. J. McCarthy, R.M., W. McCammond, Jno. Bourke, Esqs., Police Court, Belfast.	Having on 30th December 1892, and seven days prior thereto, employed five young persons without certificates of fitness.	0 5 0	0 12 6	
Feb. 7	R. S. Birch & Co., fancy box manufacturers, 9, Linenhall Street, Belfast.	Thos. Browne, J.P., John Gregg, J.P., Esqs., Belfast Police Court.	Having on Tuesday, 19th January 1893, and for a period exceeding seven days prior thereto, employed two young persons without having obtained certificates of fitness in the prescribed form.	1 0 0	0 5 0	
" 21	Lullatober Bleaching and Printworks Co., Limited, Carrickfergus.	Wm. Woodside, Wm. Gorman, Daniel Bowman, Esqs., Carrickfergus Police Court.	Having on Friday, 3rd February 1893, employed five women and one young person after 8 p.m.	1 10 0	0 15 0	
"	" "	" "	Having on Friday, February 3rd, 1893, neglected to securely fence the fly wheel of a steam engine which was at the time driving a linen printing machine.	0 1 0	0 2 6	The magistrates inflicted only a nominal penalty inasmuch as the fly wheel had since been fenced.
Mar. 14	Murphy and Stevenson, Limited, handkerchief manufacturers, Ormeaw Avenue, Belfast.	R. J. Eaton, R.M., Jno. Gregg, J.P., Esqs., Belfast Police Court.	Having on Friday, February 3rd, 1893, employed three young persons and three women under a special exception to the hour of ten of the clock at night, the particulars of which employment were not entered in the prescribed Register nor reported to the Inspector.	6 0 0	0 15 0	
" 21	Thos. Weatherup, shoemaker, Carrickfergus.	Robert McMurray, J.P., W. A. Woodside, J.P., W. Gorman, J.P., Esqs., Police Court, Carrickfergus.	Having on Thursday, February 16th, 1893, neglected to affix Abstract at entrance to his workshop.	0 2 6	0 2 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Belfast District*—cont.	£ s. d.	£ s. d.	
Mar. 22	The Clarence Factory, Limited., Linen Weavers, Bedford Street, Belfast.	D. Keatley, J.P., and E. W. Pimm, J.P., Esqs., Police Court, Belfast.	Having on Tuesday 7th March 1893, employed three women after 6 p.m.	1 10 0	0 8 6	
"	" "	" "	Having on Wednesday 8th March 1893, employed two women after 6 p.m.	1 0 0	0 5 0	
"	" "	" "	Having on Thursday 9th March 1893, employed one woman after 6 p.m.	0 10 0	0 2 6	
"	" "	" "	Having on Friday 10th March 1893, employed six women and one young person after 6 p.m.	3 10 0	0 17 6	
May 16	Lindsay Thompson & Co., Limited, flax spinners, Flax Street, Belfast.	E. W. Pimm, J.P., Jno. Gregg, J.P., Esqs., Police Court, Belfast.	Having employed one young person and five women after the hour of thirty minutes past one of the clock in the afternoon on Saturday 1st April 1893.	0 3 0	0 15 0	No complaint having ever previously been made against this firm and taking into consideration that this occurred just before a holiday, rendering the wet yarn liable to be destroyed, I was instructed to ask for a nominal penalty.
"	" "	" "	Having employed six women after the hour of six of the clock in the evening of Friday 31st March 1893.	0 3 0	0 15 0	
"	" "	" "	Having employed five children on Saturday 1st April 1893, having also been employed on Friday 31st March, 1893.	0 2 6	0 12 6	
July 3	Thos. Sinton & Co., Killyleagh.	Captain L'Estrange, R.M., Jas. Hay, J.P., and Jas. Gourlay, Esqs., Killyleagh Police Court.	Having employed two children, two young persons and six women after 6 p.m. on Friday 2nd June 1893.	2 10 0	0 15 0	In all these cases I asked for a substantial penalty, and referred to the fact that in Lancashire heavy penalties are given for running three minutes overtime. The R. Magistrate stated that the Irish manufacturers are not as rich as the Lancashire manufacturers.
"	" "	" "	Having employed five children on two successive days, to wit, Tuesday 6th June and Wednesday 7th June 1893.	1 5 0	0 7 6	
"	Jno. Martin, Limited, Shryley	" "	Having employed ten children on two successive days, to wit, Wednesday 7th June and Thursday 8th June 1893.	2 10 0	0 15 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Belfast District—cont.*	£ s. d.	£ s. d.	
July 24	Hannah Jane Armour, dressmaker, 23, Donegall Pass, Belfast.	F. J. McCarthy, R.M., E. W. Pimm, J. Gregg, and Jas. Henderson, Esqs., Police Court, Belfast.	Having on Saturday, 13th May 1893, employed two women after 4 p.m.	0 5 0	0 7 0	
"	E. & M. Green, dressmakers, 13, Salway Street, Belfast.	" "	Having on Saturday, 6th May 1893, employed two young persons after 4 p.m.	0 5 0	0 7 0	
"	Sarah Bell, dressmaker, 25, Donegall Pass, Belfast.	" "	Having on Saturday, 13th May 1893, employed one woman after 4 p.m.	0 2 6	0 3 6	
Oct. 3	A. W. Thompson, handkerchief manufacturer, Edgar Street, Mountpottinger, Belfast.	F. J. McCarthy, R.M., and E. W. Pimm, J.P., Esqs., Police Court, Belfast.	Having on Thursday, 24th August 1893, employed seven women before the hour of eight of the clock in the morning.	0 17 6	0 17 6	
" 6	John Wilson & Co., shirt manufacturers, Harryville, Ballymena.	Robt. Simpson, J.P., and C. Rutherford, R.M., Esqs., Police Court, Ballymena.	Having on Friday, 18th August 1893, and seven days prior thereto employed eight young persons, all being under 16 years of age, without having obtained certificates of fitness from the certifying surgeon.	1 0 0	1 12 0	
"	Thomas Agnew, linen manufacturer, Leighenmohr, Ballymena.	" "	Having on Wednesday, 9th August 1893, employed one young person and five women after six of the clock at night.	1 10 0	1 4 0	
1892.			*In the Dublin District.*			
Nov. 24	Wm. Love, saw mill, Maylor Street, Cork.	C. Mayne, Esq., Resident Magistrate, Cork.	Neglecting to report accident to Wm. Martin on 2nd September 1892, to the Inspector and Certifying Surgeon.	0 5 0	0 3 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Dublin District*—cont.	£ s. d.	£ s. d.	
Feb. 10	Cannock & Co. of George Street, Limerick.	Bryan O'Donnell (Mayor), Zachary Myles, Esqs., and five others, Limerick.	Employing four women after 4 p.m. on weekly half-holiday.	0 4 0	0 5 6	
„ 18	John Green, tobacco factory, North King Street, Dublin.	C. J. O'Donel, Esq., Chief Magistrate, Dublin.	Neglecting to produce Factory Register on 18th January 1893.	1 0 0	0 2 0	
„	„ „	„ „	Neglecting to affix copy of non-textile factory Abstract in tobacco factory on 18th January 1893.	1 0 0	0 2 0	
Mar. 13	John D. Murphy, corn miller, the Corn Mill, Mill Street, Co., Cork.	F. R. McDermott, Esq., Resident Magistrate, Petty Sessions Court, Mill Street.	For not guarding water wheel on 9th February 1893.	2 0 0	0 1 6	
„ 18	Laurence Malone, chairman, Dublin Distillers' Co., Marrowbone Lane, Dublin.	E. G. Swifte, Esq., Stipendiary Magistrate, Dublin.	Neglecting to report to Inspector and certifying surgeon, accident to one John Pluck on 7th January 1893.	0 10 0	0 2 0	This case adjourned from 18th February, 1893.
„ 25	George W. Tully, printer, of the Westmeath Nationalist, Mullingar, Co. Westmeath.	Major A. V. O'Brien (Chairman) and John Swift, Esq.	(1.) Not giving notice of occupation - -	- -	0 4 6 (for (1.)–(3.))	On the 25th day of March the fly wheel was well guarded and the Abstract was fully filled, therefore the case was withdrawn on the defendant promising to pay costs, this proceeding met with the hearty approval of the Bench.
„	„ „	„ „	(2.) Not guarding fly wheel of engine - -	- -		
„	„ „	„ „	(3.) Not affixing Abstract - - -	- -		
May 27	Thos. Monaghan, dressmaker, 14, Lower Baggot Street, Dublin.	E. Swifte, Esq., Stipendiary Magistrate, Dublin.	Employing three females after 10 p.m., to wit, 10.10 p.m. on Saturday, 6th May 1893.	3 0 0	0 6 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Dublin District*—cont.	£ s. d.	£ s. d.	
Oct. 16	Miss Hannah Frances O'Connell, dressmaker, Patrick Street, Fermoy, co. Cork.	Major Hutchinson, Colonel Collis, and C. J. Finley, Esq., Fermoy Petty Sessions Court.	Not having hung up the copy of workshop Abstract on 13th September 1893.	0 1 0	0 1 6	The Magistrates said that in giving these small penalties they thought they would be a sufficient warning to others, but would put heavier penalties on the next offenders. This was the first case in Fermoy.
"	" "	" "	Not giving weekly half holiday to Mary Ahern on Saturday, 9th September 1893.	0 1 0	0 1 6	
"	Mrs. Lizzie Coleman, dressmaker, Patrick Street, Fermoy, co. Cork.	" "	Not having hung up the copy of workshop Abstract on 13th September 1893.	0 1 0	0 1 6	
"	" "	" "	Not giving weekly half holiday to Nora Ahern on Saturday, 9th September 1893.	0 1 0	0 1 6	
Oct. 19	Michael Rowe & Co., drapers, 28, North Earl Street, Dublin.	J. Byrne, Esq., Northern Police Court, Dublin.	Failing to send H.M. Inspector of Factories notice of overtime worked on Saturday, the 16th of September.	1 0 0	0 4 0	
"	" "	" "	Failing to affix Record 12 and make entry therein of overtime upon same date.	1 0 0	- -	
"	Mrs. Carver, draper, 28, North Earl Street, Dublin.	"	Failing to send H.M. Inspector of Factories notice of overtime worked on Saturday, 16th of September.	0 1 0	0 4 0	
"	" "	" "	Failing to affix Record 12 and make entry therein of overtime upon same date.	0 1 0	- -	
"	James Ellis & Co., drapers, 64 and 65, Sth. Great George Street, Dublin.	C. J. O'Donnel, Esq., Southern Police Court, Dublin.	Failing to send H.M. Inspector notice of overtime worked upon Saturday, 23rd September.	0 1 0	0 4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Dublin District*—cont.	£ s. d.	£ s. d.	
Oct. 19	James Ellis & Co., drapers, 64 and 65, Sth. Great George Street, Dublin.	C. J. O'Donnel, Esq., Southern Police Court, Dublin.	Failing to affix Record 12 and make entry therein of overtime worked upon same date.	0 1 0	0 2 0	
„	May Allen, 51, Grafton Street, Dublin.	„ „	Failing to keep Abstract affixed - -	0 10 0	0 2 0	
1892.			*In the North East of England District.*			
Nov. 1	Francis Duffy, dressmaker, 28, Carr Street, Hebburn.	E. J. J. Browell (Chairman), Colonel W. H. Allison, County Police Court, South Shields.	Failing to affix the prescribed Abstract in his workshop.	0 1 0	0 7 0	
„ 3	Jane Eleanor Sewars, dressmaker, 25, Albert Road, Jarrow-on-Tyne.	Thos. Brady and J. T. O. Penman, Esqs., Borough Police Court, Jarrow.	Not keeping the prescribed Abstract affixed in the workroom.	0 1 0	- -	No costs were charged in this case.
„ 7	P. T. Yeats, tailor, Atheneum Buildings, Lynn Street, West Hartlepool, co. Durham.	G. Pyman (Chairman), R. C. Walker, and W. H. Fisher, J.P., Esqs., Borough Police Court, West Hartlepool.	Failing to affix and to keep affixed in his workshop the prescribed Abstract.	0 2 6	0 7 0	
„ 11	Robert Youll, letterpress printer, 28, Northumberland Street, Sunderland.	Thomas Steel (Chairman) and R. M. Hudson, senior, J.P., Esqs., Borough Police Court, Sunderland.	Failing to keep the prescribed Register -	0 2 6	0 8 0	
„ 12	John Bosworth Bowes, letterpress printer, West End Printing Works, Fenkle Street, Newcastle-on-Tyne.	J. G. Hunter (Chairman) and Wm. Young, J.P., Esqs., City Police Court, Newcastle.	Employing two young persons more than the time allowed without having obtained certificates of fitness.	1 0 0	0 14 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the North East of England District*—cont.	£ s. d.	£ s. d.	
Nov. 12	Wm. Tennant, clay pipe maker, Bell's Court, Pilgrim Street, Newcastle-on-Tyne.	J. G. Hunter (Chairman) and Wm. Young, J.P., Esqs., City Police Court, Newcastle.	Employing one young person for more than the time allowed without having obtained a certificate of fitness.	0 10 0	0 6 0	
" 15	Christopher Stainson, brick maker, Easington Brick and Tile Works, East Boldon.	Col. W. H. Allison, T. B. Briggs, and John Readhead, J.P., Esqs., County Police Court, South Shields.	Failing to give notice of beginning to occupy a factory.	- -	0 1 0	Fined 1s., to include costs.
"	John Hornsby and Sons, brick makers, Cleadon Junction Brick Works, East Boldon.	" "	Failing to give notice of beginning to occupy a factory.	- -	0 1 0	Fined 1s., to include costs.
"	A. Lilley & Co., screw makers, East Boldon.	" "	Failing to give notice of beginning to occupy a factory.	- -	0 1 0	Fined 1s., to include costs.
"	Robert Allison, brick maker, Cleadon Lane Brick Works, East Boldon.	" "	Failing to affix the prescribed Abstract in his factory.	0 10 0	0 7 0	
"	" "	" "	Employing a young person without a certificate of fitness.	0 10 0	0 7 0	
" 24	Portobello Glass Co., plate glass makers, Portobello Glass Works, Sunderland.	Edward Featherstone-Haugh and John Harrison, J.P., Esqs., Borough Police Court, Sunderland.	Failing to give notice of beginning to occupy a factory.	0 10 0	0 7 6	
" 23	Hartlepool Pulp and Paper Co., Limited, paper makers, Burn Road, West Hartlepool.	—. Robinson (Mayor), George Pyman, and R. C. Walker, J.P., Esqs., Borough Police Court, West Hartlepool.	Employing a young person too long without a certificate of fitness.	0 5 0	0 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the North East of England District*—cont.	£ s. d.	£ s. d.	
Nov. 28	Cleveland Harker, mantle maker, Bon Marché, West Hartlepool.	—. Robinson (Mayor), George Pyman, and R. C. Walker, J.P., Esqs., Borough Police Court, West Hartlepool.	Not affixing the prescribed Abstract in his workshop.	0 5 0	0 7 0	
" 29	Northumbrian Chemical Co., Limited, chemical manufacturers, Heworth Shore, near Gateshead, co. Durham.	Lord Ravensworth and J. G. Hodgson, Esq., J.P., County Police Court, Gateshead.	Failing to give notice of beginning to occupy a factory.	0 2 6	0 7 6	Owing to a mistake of the magistrates' clerk the summons was made returnable for 29th November instead of 6th December. In my absence the case was heard and the above fine imposed.
Nov. 29	South Durham Glass Company, glass makers, South Durham Glass Works, East Hartlepool, co. Durham.	Alderman Horsley, Alderman Black and F. G. Morrison, Esq., J.P., Boro' Police Court, East Hartlepool.	Failing to give notice of occupying a factory -	0 5 0	0 9 0	
"	" "	" "	Failing to keep the prescribed Register -	0 5 0	0 9 0	
"	" "	" "	Employing three young persons more than the time allowed without having obtained certificates of fitness.	0 7 6	1 17 6	
"	J. J. Hardy and Sons, brass-founders, Hartlepool Brass and Engine Works, East Hartlepool.	" "	Employing two young persons more than the time allowed without having obtained certificates of fitness.	0 5 0	0 18 0	
Dec. 14	Chester-le-Street and District Printing and Publishing Company Limited, letter-press printers, Chester-le-Street, co. Durham.	H. W. Kerrick-Walker and F. S. Newall, J.P., Esqs., County Police Court, Chester-le-Street, co. Durham.	Employing a young person, Wm. Legg, more than seven days without a certificate of fitness.	0 5 0	0 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the North East of England District*—cont.	£ s. d.	£ s. d.	
Dec. 14	Reavley and Son, aerated water manufacturers, Chester-le-Street, co. Durham.	H. W. Kerrick-Walker and F. S. Newall, J.P., Esqs., County Police Court, Chester-le-Street, co. Durham.	Failing to give notice within one month of beginning to occupy a factory.	0 2 6	0 7 0	
"	David Jackson, aerated water manufacturer, Chester-le-Street, co. Durham.	" "	Employing a child, John Shields, more than seven days without a certificate of fitness.	0 1 0	0 10 6	
"	" "	" "	Employing a child, John Shields, neither on the system of employment in morning and afternoon sets, nor on the system of alternate days only.	0 1 0	0 7 0	
"	Thompson and Sons, Saw Mill, Chester-le-Street, co. Durham.	" "	Failing to affix and to keep affixed the prescribed Abstract.	- -	0 4 6	
" 29	James G. Scott, milliner, Clyde House, High Street West, Sunderland.	S. Richardson (Mayor), and Alderman McKenzie, Borough Police Court, Sunderland.	Failing to affix and to keep affixed in the workshop the prescribed Abstract.	0 2 6	0 7 6	
"	R. W. Wilson, milliner, 5, High Street West, Sunderland.	" "	Failing to affix and to keep affixed in the workshop the prescribed Abstract.	0 2 6	0 7 6	
30	Walkers, Parker & Co., Limited, white lead manufacturers, Elswick Lead Works, Newcastle-on-Tyne.	J. Hunter (Chairman), and Hugh Morton, J.P., Esqs., City Police Court, Newcastle.	Employing a young person in the process of making white lead.	0 5 0	0 14 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the North East of England District*—cont.	£ s. d.	£ s. d.	
Dec. 30	George Handyside, letter-press printer, Hull Street, Bentinck, Newcastle-on-Tyne.	J. Hunter (Chairman) and Hugh Morton, J.P., Esqs., City Police Court, Newcastle.	Failing to affix and to keep affixed in his factory a copy of the prescribed Abstract.	0 10 0	0 6 0	
1893. Feb. 14	Sunderland Post Company, Limited, letterpress printers, West Wear Street, Sunderland.	Ed. Featherstone-Haugh, James Stokoe, and James O'Neill, J.P., Esqs., Borough Police Court, Sunderland.	Employing a woman overtime without keeping the Record and Register of overtime.	- -	0 17 0	The Magistrate thought it sufficient for the defendant to pay costs.
"	" "	" "	Employing two women continuously for more than five hours without allowing at least half-an-hour for a meal.	- -	0 18 0	Costs paid by me. The witnesses stated that ordinarily they worked from 1 to 6.30, with ½ hour allowed for a meal, but that on the day named owing to special circumstances they did not commence until 1.15 and 1.30 respectively.
"	Edward Moran and Son, bookbinders, Villiers Street, Sunderland.	" "	Employing four young persons for more than the time allowed without certificates of fitness.	4 0 0	2 8 0	Second conviction for the same offence within two years.
" 22	C. T. Bainbridge and Son, Limited, paper makers, Tees Paper Mills, Eaglescliffe, co. Durham.	Marshall Fowler (Chairman) and J. W. Page Page, J.P., Esqs., County Police Court, Stockton-on Tees.	Employing four young persons for more than the time allowed without certificates of fitness.	1 0 0	3 0 0	The Magistrate ordered the defendant company to pay 1*l.* in each case including costs.
" 23	J. Slee & Co., letterpress printers, Prince Regent Street, Stockton-on-Tees, co. Durham.	Alderman Thos. Nelson (Chairman), Francis Robinson, Jas. Brown, and Alderman Rd. Hinde, J.P., Esqs., Borough Police Court, Stockton-on-Tees.	Employing two women overtime without keeping the Record and Register of overtime.	1 6 0	0 14 0	" "
"	" "	" "	Failing to give notice of beginning to occupy a new factory.	0 13 0	0 7 0	" "

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the North East of England District*—cont.	£ s. d.	£ s. d.	
April 21	Haggie Bros., wire rope manufacturers, South Shore, Gateshead.	Henry Charlton (Chairman), Thomas Rule, Esqs., Gateshead Police Court.	Employing five women after 6 p.m., to wit, at twenty-five minutes after seven o'clock at night on March 27th, 1893.	0 12 6	1 10 0	Five cases, 2*s.* 6*d.* and costs in each case.
July 25	William Crosier Thompson, trading as Thompson & Co., Liverpool House, High Street, Sunderland.	W. Wilson (Chairman), T. Steel, J. S. Barwick, P. Pratt, and A. T. Crow, Senr., Esqs., Sunderland Police Court.	Employing two women at millinery making, after 10 p.m. on Saturday June 3rd, 1893, to wit, at 10.25 p.m.	0 5 0	0 15 0	Fined 2*s.* 6*d.* and 15*s.* costs in each of the two cases.
Aug. 1	Dorward and Sons, aerated water manufacturers, Bridge End, Darlington.	E. Mannors (Mayor) and J. Bartlett, Esqs., Darlington Police Court.	Employing two females after 2 p.m. on Saturday July 1st, 1893, to wit, at 5.50 p.m.	- -	0 8 0	As it was shown that this firm had only recently taken over this business, I agreed to withdraw the cases on payment of costs in both cases.
„	Marion Ball, dressmaker, 10, Duke Street, Darlington.	„ „	Employing two females after 4 p.m. on Saturday July 1st, 1893, to wit, at 4.58 p.m.	- -	0 8 0	As Miss Ball had not been visited before, I agreed to withdraw these cases also on payment of costs in both cases.
Sept. 1	Chas. M'Donald, aerated water maker, Dale Street, Middlesbro.	C. Lothian Bell, Esq., and Dr. Ellerton, Town Hall, Middlesbro.	Employing three women overtime without reporting the same.	0 3 0	1 7 0	
„	Middlesbro and District Mineral Water and Bottling Company, Limited, Middlesbro.	„ „	Employing two women after 8 p.m., viz., until 10.20 p.m.	0 7 0	1 3 0	
Oct. 20	J. Dowling and Sons, letterpress printers, Blue Post Yard, Newcastle on Tyne.	Col. Angus and — Young, Esq., City Police Court, Newcastle on Tyne.	Failing to keep the prescribed Register of young persons, 30th September.	0 10 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the North East of England District*—cont.	£ s. d.	£ s. d.	
Oct. 21	John Meikle, brick maker, Castletown, co. Durham.	Sir Hedworth Williamson, John Dickenson, Esq., and Col. Gourley, Borough Police Court, Sunderland.	(1.) Failing to securely fence the fly wheel of a steam engine.	1 0 0	0 13 6	
"	" "	" "	(2.) Failing to securely fence a belt being part of the mill gearing, which was not of such construction, nor in such a position as to be equally safe to every person employed in the factory, as it would be if it were securely fenced.	- -	0 13 6	Fined in costs only.
" 23	Nathan Elsdon, mineral water maker, Delves Lane, Consett co. Durham.	W. Wilson and Hans Bergen, Esqs., Consett Police Court.	Having failed to procure certificates of fitness for two young persons under the age of 16 years employed over the legal period.	1 0 0	0 17 0	
" 24	J. W. Thompson, iron founder, Sheepfolds, Sunderland, co. Durham.	— Stokoe and — O'Nield, Esqs., Borough Police Court, Sunderland.	Failing to keep the prescribed Register of young persons.	0 5 0	0 13 6	
1892.			*In the North West of England District.*			
Nov. 9	The Moss Bay Hematite Iron and Steel Company Limited manufacturers of iron and steel rails, &c., Moss Bay, Workington.	T. S. Douglas, Esq. (Chairman), and Captain Robinson, Workington.	Employing a male young person during part of the day, he having also been employed during the preceding night.	0 6 0	1 4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the North West of England District*—cont.	£ s. d.	£ s. d.	
Nov. 9	William Jones, contractor, Moss Bay Iron Works, Workington.	T. S. Douglas, Esq. (Chairman), and Captain Robinson, Workington.	Employing a male young person during part of the day, he having also been employed during the preceding night.	0 6 0	1 4 0	
„ 14	John Humber, cotton cloth manufacturer, Bushell Street, Preston.	William Birley (Chairman), and J. C. Hamilton, Esqs., Preston.	Employing eleven females during part of the time allowed for a meal on 10th October, 1892.	0 5 0	2 1 0	Penalty in one case only. Costs in all.
Dec. 17	John Wilkinson, brush maker &c., High Street, Preston.	John Humber, and M. B. Copland, Esqs., Preston.	(1.) Employing two male young persons without having registered their names and other particulars.	0 5 0	} 1 1 0	
„	„ „	„ „	(2.) Employing the same two male young persons without having obtained certificates of their fitness for employment.	-		
1893.						
Jan. 11	Smith Brothers, cotton cloth manufacturers, Orchard Mill, Croston, Lancashire.	The Rev. J. F. Hogg-Goggin (Chairman), and S. C. de Trafford, Esq., Chorley.	Employing some two hundred women and children, until ten minutes past six o'clock in the evening of 8th December 1892, when they should not have been so employed later than six o'clock. (15 cases only taken.)	3 15 0	8 5 0	5s. fine and 11s. costs in each case. The costs seem very heavy considering there were no witnesses summoned.
„ 13	Roach Bridge Paper Company, Limited, Samlesbury, near Preston.	J. Whitehead (Chairman), and H. Calvert, Esqs., Preston.	Neglecting to send notice to the inspector for the district of a fatal accident which occurred in their works to a man named George Thompson on 19th December 1892.	0 10 0	0 11 0	
Feb. 28	John Whittle & Co., railway waggon builders, Union Waggon Works, Chorley.	H. Rawcliffe, Esq., and Captain R. L. Crosse, Police Court, Chorley.	Not keeping their factory in conformity with the Act, by neglecting to fence the engine, mill-gearing, and certain parts of the machinery	5 0 0	0 11 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the North West of England District*—cont.	£ s. d.	£ s. d.	
Mar. 1	H. Bannister, draper and costumier, 32, Fishergate, Preston.	Dr. J. B. Gilbertson, and J. Satterthwaite, Esq., Police Court, Preston.	Employing six women at dressmaking for a period of about 21 hours—namely, from 7 a.m. on Tuesday 24th January, until 4 a.m. on Wednesday, 25th January 1893.	5 0 0	1 5 6	Full penalty in one case and costs in all.
„ 7	Benjamin Sweeten, Editor of "The Cumberland and Westmoreland Advertiser," Penrith.	Major Hasell (Chairman), and Joseph Harris Esq., Penrith.	Not keeping his printing office in conformity with the Factory Act by neglecting to limewash it every fourteen months.	1 0 0	0 9 6	Mr. Sweeten is Chairman of the Local Board of Health. I gave him notice in writing and several times verbally that he must limewash his works, but he refused to do so.
„ 27	T. R. & E. Harrison, cotton spinners, Brook Mill Kirkham, Lancashire.	R. Dunderdale (Chairman), and Thomas Fair, Esqs., Court House, Fleetwood.	Employing sixteen females during part of the time allowed for a meal, to wit, at 5.35 p.m. on Thursday, 9th March 1893.	1 0 0	8 3 6	Penalty of 1*l.* inflicted in one case and costs in all.
Apr. 21	Benjamin Walmesley, cotton spinner, Lord Street Mill, Preston.	W. P. Park (Chairman), and E. Greenwood, Esqs., Preston.	Employing six women in a manufacturing process twenty minutes after the proper time for such work to cease on Saturday, 8th April 1893.	• •	1 1 0	Defendant admitted the offence, but pleaded ignorance of the law, although he has been many years a cotton spinner. The Chairman said that this explanation was quite satisfactory and payment of costs only was ordered. One of the Magistrates stated however that this extraordinary decision was *not* the unanimous opinion of the Bench.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the North West of England District*—cont.	£ s. d.	£ s. d.	
July 3	S. S. Lord, Limited, "Barrow News" Office, Hindpool Road, Barrow-in-Furness.	Dr. J. T. Williams (Chairman), and J. S. Ormandy, Esq., Borough Magistrate's Court Barrow-in-Furness.	(1.) Neglecting to register the names of two young persons employed in their factory.	0 1 0	1 10 0	
"	" "	" "	(2.) Failing to obtain certificates of fitness for employment for the same two young persons.	0 2 0		
"	Mrs. Elizabeth Dransfield, dressmaker, 160, Dalton Road, Barrow-in-Furness.	" "	Employing two young persons, and three women from about seven o'clock in the morning until nearly twelve o'clock mid-night.	1 5 0	2 19 6	The Magistrates said that as this was the first case of the kind brought before them they would only inflict a small penalty, but they wished it to be known that in future the maximum penalty would be exacted in such cases.
" 19	Misses Clarke and Jones, dressmakers, 11, Winckley Street, Preston.	Dr. J. B. Hodgson (Chairman), and J. Toulmin, Esq., Borough Police Court, Preston.	Employing six women from half-past six o'clock in the morning until ten o'clock at night on 20th June 1893.	1 0 0	1 16 6	Fined 1*l.* in first case and costs in other five.
Aug. 9	Alfred Horrax, bobbin maker, Stock Ghyll Mill, Ambleside.	F. M. T. Jones, and G. Redmayne, Esqs., Petty Sessions Ambleside.	(1) Employing a male young person without having registered his name, &c., &c.	0 1 0	0 18 6	As these were the first prosecutions of the kind in the Lake District, I only asked for a nominal penalty to carry costs.
"	" "	" "	(2) Employing the same young person without having obtained a certificate of his fitness for employment.	0 1 0		

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the North West of England District—cont.	£ s. d.	£ s. d.	
1893.						
Aug. 9	W. Stalker and Son, cabinet makers, Ambleside.	F. M. T. Jones, and G. Redmayne, Esqs., Petty Sessions, Ambleside.	(1.) Employing a male young person without having registered his name, &c., &c.	0 1 0	0 17 6 (for items 1 and 2)	As these were the first prosecutions of the kind in the Lake District, I only asked for a nominal penalty to carry costs. (applies to the five Ambleside entries)
"	" "	" "	(2.) Employing the same young person without having obtained a certificate of his fitness for employment.	0 1 0		
"	William Dixon, joiner &c., Ambleside.	" "	(1.) Employing two male young persons without having registered their names, &c., &c.	0 1 0	1 15 0 (for items 1, 2 and 3)	
"	" "	" "	(2.) Employing the same young persons without obtaining certificates of their fitness for employment.	0 1 0		
"	" "	" "	(3.) Neglecting to have an Abstract of the Factory and Workshops Act affixed in his works.	0 1 0		
Sept. 18	William Eaves & Co., brickmakers, Central Brick Works, Blackpool.	Henry Fisher (Chairman), Robert Catterall, Esqs., Court House, Blackpool.	(1.) Neglecting to send notice of beginning to occupy a factory.	0 2 6	0 10 0	
"	" "	" "	(2.) Neglecting to fence a steam engine - -	0 10 0	0 10 0	
"	" "	" "	(3.) Employing four male young persons and one child without certificate of fitness.	- -	2 10 0	Five informations. Costs only inflicted.
"	Joseph Fielding and Sons, brickmakers, North Cliff Brick Works, Blackpool.	" "	Neglecting to send notice of beginning to occupy a factory.	0 2 6	0 10 0	
"	James Cardwell and Brothers, brickmakers, Raikes Works, Blackpool.	" "	Neglecting to send notice of beginning to occupy a factory.	0 2 6	0 10 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the North West of England District*—cont.	£ s. d.	£ s. d.	
Sept. 18	William Moister, brickmaker, Caunce Street Works, Blackpool.	Henry Fisher (Chairman), Robert Catterall, Esqs., Court House, Blackpool.	Neglecting to send notice of beginning to occupy a factory.	0 2 6	0 10 0	
"	Woods and Robinson, brickmakers, Whitegate Lane, Blackpool.	" "	Neglecting to send notice of beginning to occupy a factory.	0 2 6	0 10 0	
" 28	J. Winder, baker, Ulverston Road, Dalton.	Col. Baldwin, Col. Ainsworth, and A. B. Dickson, Esq., Ulverston Police Court.	Employing a young person of 16 years of age before 5 a.m.	0 1 0	0 15 5	Being first case of kind at this court, small fine only inflicted.
1892.			*In the Blackburn District.*			
Nov. 3	J. H. Haworth, saw mill, Irwell Saw Mill, Ramsbottom.	S. Knowles and R. Allen, Esqs., County Police Court, Bury.	Not reporting accident - - - -	0 5 0	0 12 0	
" 21	Anderton and Halstead, cotton manufacturers, Albert Mill, Haslingden.	T. B. Hamilton, T. Whittaker, and J. A. Harrison, Esqs., Police Court, Haslingden.	Employing a young person during a meal time	0 5 0	0 15 6	
1893.						
Jan. 12	J. J. Riley, letterpress printer, Back Duckworth Street, Darwen.	J. Cocker, and T. Lightbown, Esqs., Darwen.	Employing two children full time - -			
"	" "	" "	Employing a child four months without a certificate of fitness.	0 10 0	1 13 0	Five informations. Penalty and costs in one case; costs in others.
"	" "	" "	Employing a young person six months without certificate of fitness.			
"	" "	" "	Failing to keep Register with prescribed particulars.			

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Blackburn District*—cont.	£ s. d.	£ s. d.	
Feb. 13	Greenwood Brothers, cotton spinners, Carr Mill, Haslingden.	T. B. Hamilton and T. Whittaker, Esqs., Police Court, Haslingden.	Allowing 10 women to remain in a room in which a manufacturing process was being carried on, during a meal time.	0 5 0	3 19 6	Penalty and costs in one case; costs in others.
" 23	Enoch Crabtree, cotton manufacturer, Rhoden Mill, Oswaldtwistle.	J. L. Grimshaw, and John Riley, Esqs., Police Court, Church.	Allowing 10 females to remain in a room in which a manufacturing process was being carried on, during a meal time.	2 0 0	4 7 0	Penalty of 10*s.* and costs, four cases; costs in other six.
"	Fern Manufacturing Co., Limited, cotton manufacturers, Clayton-le-Moors.	" "	Failing to produce proof of school attendance in the case of four children.	2 0 0	3 18 0	
"	" "	" "	Failing to procure certificates of fitness in the case of two children.	1 0 0	1 4 0	
"	" "	" "	Failing to keep Register in prescribed form and with prescribed particulars.	0 10 0	0 12 0	
July 20	Holden Brothers, cotton manufacturers, Brewery Mill, Clitheroe.	T. Omerod and A. Roberts, Esqs., Police Court, Clitheroe.	Allowing four young persons and six women to remain in a room in which a manufacturing process was being carried on during a meal time.	0 5 0	2 12 0	Penalty and costs in one case; costs in others.
" 27	Ramsbottom Spinning and Manufacturing Co., Limited, cotton spinners and manufacturers, Stubbins, Ramsbottom.	A. C. Bealey and F. Wrigley, Esqs., Police Court, Bury.	Employing one young person and 10 women during a meal time.	0 5 0	2 3 6	
Sept. 13	S. Longworth and Sons, cotton spinners and manufacturers, Judge Walmsley Mills, Billington.	Col. Butler Bowdon and F. Openshaw, Esq., County Police Court, Blackburn.	Employing a child and a young person during a meal time.	- -	1 14 4	Convicted in costs only.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Blackburn District*—cont.	£ s. d.	£ s. d.	
Sept. 14	Parkinson and Blacow, letterpress printers, Market Place, Clitheroe.	J. H. Clarke and E. Crabtree, Esqs., Police Court, Clitheroe.	Employing a young person after 2 o'clock on a Saturday, viz., up to 9 p.m.	1 0 0	0 16 6	
"	" "	" "	Employing a young person after 2 o'clock on a Saturday, viz., up to 5 p.m.	- -	0 11 6	At the suggestion of the Bench I agreed to accept costs in these three cases.
"	" "	" "	Employing two young persons after 6 o'clock at night, viz., up to 10.30 p.m.	- -	1 3 0	
"	" "	" "	Employing a young person for more than seven work days without surgical certificate.	0 1 0	1 1 6	
" 18	Hartley Brothers, cotton manufacturers, Alma Mill, Blackburn.	F. Thomas and Jas. Boyle, Esqs., Borough Police Court, Blackburn.	Allowing one young person and nine women to remain in a room in which a manufacturing process was being carried on during a meal time.	2 0 0	2 2 0	Penalty of 1*l.* and costs in each of two cases, costs in remainder.
"	Wm. Lancaster, iron foundry. Bastwell, Blackburn.	" "	Neglecting to fence fly wheel of engine -	2 0 0	0 9 0	
"	R. Gornall, Clifton Street, spindle and flyer manufacturer, Blackburn.	" "	Employing a young person after 2 p.m. on a Saturday.	0 10 0	0 11 0	
"	" "	" "	Employing a young person on a Sunday -	0 10 0	0 11 0	
Oct. 9	Haslingden Commercial Co., Limited, cotton manufacturers, Haslingden.	T. B. Hamilton and G. A. Smith, Esqs., Police Court, Haslingden.	Allowing 10 women to remain in a room in which a manufacturing process was being carried on during meal time.	2 0 0	4 4 0	Penalty of 1*l.* and costs in each of two cases, costs in remainder.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Leeds District.*	£ s. d.	£ s. d.	
Nov. 4	C. H. Wild, cloth finisher, Yeadon.	Ayscough Fawkes, William Fison, and J. Garnett, Esqs., Otley Police Court.	Neglecting to exhibit at the entrance to his factory an Abstract of the Act.	- -	0 6 6	As Mr. Wild pleaded ignorance and agreed to exhibit an Abstract in future, the Bench considered payment of costs sufficient.
„ 16	Lister and Smalley, saw mill, Leeds.	Jas. Walker and T. R. Harding, Esqs., Town Hall, Leeds.	Neglecting to send notice of a factory occupied by him.	0 10 0	0 7 6	
„	T. Denison Cliffe, slipper maker, Leeds.	„ „	Neglecting to send notice of a workshop occupied by him.	0 10 0	0 7 6	
„	Jos. Hogan, boot maker, Leeds.	„ „	Neglecting to send notice of a factory occupied by him.	0 10 0	0 7 6	
„	Philip Goldman, boot manufacturer, Leeds.	„ „	Employing a young person for more than seven days without a certificate of fitness.	0 10 0	0 7 6	
„	Longley Bros., mattrass manufacturers, Leeds.	„ „	Employing a young person for more than seven days without a certificate of fitness.	0 10 0	0 7 6	
„	„ „	„ „	Employing same without being registered -	0 10 0	0 4 0	
„	J. M. Siddell, venetian blind manufacturer, Leeds.	„ „	Employing a young person for more than seven days without being certified.	0 1 0	0 4 0	5s., including costs.
„	„ „	„ „	Employing same without being registered -	0 1 0	0 4 0	
„	Wm. Curtis, flock manufacturer, Leeds.	„ „	Employing a young person for more than seven days without a certificate of fitness.	0 2 6	0 7 6	10s., including costs.
„	„ „	„ „	Neglecting to affix at the entrance of his factory an Abstract of the Act.	0 6 0	0 4 0	
„	H. Leetham and Sons, corn millers, Leeds.	„ „	Neglecting to fence mill-gearing - - -	2 0 0	0 4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
Nov. 25	Edwin Leathley, boot manufacturer, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Employing a child otherwise than on the system of employment in morning and afternoon sets, or on the system of alternate days only.	0 1 0	0 7 6	I did not ask for a heavy penalty in this case, as it was only to decide whether the work the child was engaged in was "employment."
Dec. 1	The Hull Fish Manure and Oil Co., Hull.	C. E. Twiss, Esq., Stipendiary Magistrate, Town Hall. Hull.	Neglecting to affix an Abstract in their factory	0 7 6	0 7 0	
" 20	J. T. Jackson, cabinet maker, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Employing three young persons without being registered.	3 0 0	1 2 6	20*s*. and costs in each case.
"	" "	" "	Employing same for more than seven days without being certified.	3 0 0	0 12 0	
"	Leeds Industrial Co-operative Society, sausage makers.	" "	Neglecting to exhibit an Abstract in their factory.	0 16 0	0 4 0	20*s*., including costs.
"	J. W. Roberts, aërated water manufacturers, Leeds.	" "	Neglecting to exhibit an Abstract in his factory.	0 6 0	0 4 0	10*s*., including costs.
"	S. Goldstone, Jew tailor, Leeds.	" "	Neglecting to exhibit an Abstract in his workshop.	1 0 0	0 4 0	
"	Wm. Ward and Son, brick manufacturers, Leeds.	" "	Employing a young person without being registered.	0 10 0	0 7 6	
"	" "	" "	Employing same for more than seven days without being certified.	0 10 0	0 4 0	
"	Goodall, Backhouse, & Co., Yorkshire relish manufacturers, Leeds.	" "	Employing two women after 6 p.m., viz., till 6.6 p.m.	- -	0 8 0	Fined in costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
Dec. 22	F. H. Galloway & Co., woollen manufacturers, Pudsey.	Theo. Peel Esq. and Col. Hirst, West Riding Police Court, Bradford.	Employing two young persons for more than seven days without being certified.	1 0 0	1 5 0	
"	" "	" "	Employing same without being registered -	0 10 0	0 9 0	
1893.						
Jan. 3	A. P. Johnson, joiner, Hull -	E. C. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Neglecting to exhibit an Abstract - -	- -	0 2 6	Owing to a mistake in the date of hearing I did not appear on the proper day, and on the cases being called, they were dismissed. The two defendants stated to the Magistrate that they had now complied with the Act.
"	J. Sleight & Co., oil crushers, Hull.	" "	Neglecting to exhibit an Abstract - -	- -	0 2 6	
" 18	Glover & Co., Limited, aërated water manufacturers, Upper Wortley Road, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Neglecting to affix an Abstract in their factory.	0 6 0	0 4 0	Penalty 10*s.*, including costs.
" 20	Mrs. Whittaker, dressmaker, 40, Albermarle Crescent, Scarborough.	W. Rowntree and B. Fowler, Esqs., Scarborough Police Court.	Neglecting to affix an Abstract in her workshop.	- -	0 5 6	These being the first cases of the kind in Scarborough, costs only were inflicted.
"	J. Bulby, tailor, 51, Thomas Street, Scarborough.	" "	Neglecting to affix an Abstract in her workshop.	- -	0 5 6	
Feb. 3	Colonial Clothing Co., clothing manufacturers, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Employing two young persons for more than seven days without being certified.	1 0 0	0 15 0	10*s.* and costs in each case.
" 6	R. B. Straker, aërated water manufacturer, Hull.	E. C. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Employing two young persons for more than seven days without being certified.	1 0 0	0 14 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
Feb. 6	Geo. Rudham, oil mill, Hull -	E. C. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Neglecting to affix an Abstract in his factory	0 10 0	0 5 0	
" 14	Crewe & Co., wheelwrights, &c., Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Neglecting to send notice that they had occupied a factory.	0 10 0	0 4 0	
"	M. Evers, engineer, Leeds -	" "	Neglecting to hang an Abstract in his factory	0 16 0	0 4 0	20*s.*, including costs.
"	W. Trevelyan, confectioner, Leeds.	" "	Neglecting to hang an Abstract in his workshop.	0 10 0	0 4 0	
"	B. Kitchen, boot manufacturer, Leeds.	" "	Neglecting to hang an Abstract in his workshop.	0 10 0	0 4 0	
"	S. Lambert, cabinet maker, Leeds.	" "	Neglecting to hang an Abstract in his workshop.	0 10 0	0 4 0	
"	E. Mulrey, boot manufacturer, Leeds.	" "	Neglecting to report an accident to H.M. Inspector.	5 0 0	0 7 6	
" 16	Rawson Bros., box makers, Hull.	C. E. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Employing two young persons for more than seven days without certificates of fitness.	1 0 0	0 12 6	
" 17	D. Marsden, joiner, Maley -	W. Carr and M. Wormald, Esqs., West Riding Police Court, Dewsbury.	Neglecting to exhibit an Abstract in his factory.	0 5 0	0 8 0	
"	Wm. Scarth, woollen manufacturer, Morley.	" "	Neglecting to fence dangerous machinery, to wit, certain straps for "scribbler" pulleys.	0 10 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
Mar. 16	Raper and Pulleyn, waterproof garment manufacturer, York.	W. J. Clutton, Esq., and Alderman Rymer, City Court, York.	Neglecting to exhibit in their workshop an Abstract of the Act.	0 1 0	0 7 0	
"	T. F. Wood & Co., saw mills, York.	" "	Employing two young persons for more than seven days without being certified.	0 10 0	1 1 0	
" 17	Wm. Roslington, woollen manufacturer, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Neglecting to limewash the tops of his factory every 14 months.	5 0 0	0 4 0	
"	Jacob Frais, Jew tailor, Leeds	" "	Employing a child as though she were a young person.	3 0 0	0 7 6	
"	M. and H. Goodman, Jew tailors, Leeds.	" "	Employing a child as though he were a young person.	3 0 0	0 7 6	
"	Daly and Langbridge, boot manufacturers, Leeds.	" "	Employing a young person without being registered.	1 0 0	0 7 6	
"	" "	" "	Employing same without being certified within seven days.	1 0 0	0 4 0	
"	Redman Bros., clothiers, Leeds.	" "	Employing two young persons for more than seven days without being certified.	4 0 0	0 15 0	
" 21	Abm. Caine, Jew tailor, Hull	C. E. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Neglecting to exhibit an Abstract in his workshop.	- -	0 3 [illegible]	Costs only inflicted.
"	I. and I. Sanders, milliners, Hull.	" "	Neglecting to exhibit an Abstract in the workshop.	0 5 0	0 5 0	
"	Executors of C. Rosendale, machinist, &c., Hull.	" "	Neglecting to exhibit an Abstract in the factory.	0 5 0	0 5 0	
"	J. T. Wray, printer, Hull	" "	Employing a young person for more than seven days without a certificate of fitness.	0 10 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
Mar. 28	H. E. Rawson, paper manufacturer, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Neglecting to securely fence the fly wheel of his engine.	9 16 0	0 4 0	10*l*., including costs.
„	„ „	„ „	Employing a young person for more than seven days without being certified.	0 2 6	0 7 6	10*s*., including costs.
„	Miss A. M. Healey, dressmaker, Leeds.	„ „	Neglecting to exhibit at the entrance to her workshop an Abstract.	- -	0 4 0	Withdrawn on payment of costs.
„	Hy. Clarkson, confectioner, Leeds.	„ „	Employing a young person after 2 p.m. on a Saturday.	0 2 6	0 7 6	10*s*., including costs.
„ 30	Pawson Bros., stone sawing, &c., Morley.	E. T. Ingham and Wm. Ackroyd, Esqs., Dewsbury Police Court.	Employing a young person for more than seven days without being certified.	1 0 0	0 15 6	
„	„ „	„ „	Neglecting to fence mill-gearing, to wit, a certain horizontal shaft.	1 0 0	0 10 0	
April 7	Jacob Davis, Jew tailor, Leeds	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Employing two young persons after 4 p.m. on a Sunday.	4 0 0	0 15 0	
„	R. B. Hollings, mantle maker, Leeds.	„ „	Neglecting to affix an Abstract in his workshop.	0 10 0	0 4 0	
„	W. H. Webb & Co., woollen manufacturers, Leeds.	„ „	Employing a young person after 6 p.m. - -	1 10 0	0 7 6	
„ 13	Tadman and Todd, iron founders, Hull.	C. E. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Neglecting to exhibit an Abstract in their factory.	0 5 0	0 5 0	
„	Steels and Sweeting, box manufacturers, St. James' Street, Hull.	„ „	Neglecting to send notice of occupation of their factory to H.M. Inspector.	0 10 0	0 5 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
April 14	British Screw Co., Kirkstall Road, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Neglecting to fence certain mill-gearing, in consequence of which a woman received bodily injuries.	20 0 0	0 16 6	
"	Hy. Tuke & Co., engineer, Leeds.	" "	Neglecting to fence the fly-wheel of their engine.	10 0 0	0 4 0	
"	Geo. Oakes and Son, joiners, Leeds.	" "	Employing a young person without being registered, and for more than seven days without a certificate of fitness.	2 0 0	0 11 6	
"	Leeds Wholesale Co-operation Society, clothiers, Leeds.	" "	Employing two young persons for more than seven days without certificates of fitness.	2 0 0	1 1 6	
"	T. H. Bracken & Co., Limited, paper manufacturers, Leeds.	" "	Employing two young persons after 6 o'clock in the afternoon.	4 0 0	0 15 0	
"	" "	" "	Employing two young persons during part of a meal time.	4 0 0	0 15 0	
"	G. F. Finister, wire mattrass manufacturer, Leeds.	" "	Neglecting to exhibit an Abstract in his workshop.	0 6 0	0 4 0	
"	C. Ibbetson, printer, Leeds -	" "	Neglecting to exhibit an Abstract in his factory.	0 6 0	0 4 0	
"	Wm. Naylor, electro-plater, Leeds.	" "	Employing a young person after 7 o'clock in the afternoon.	1 0 0	0 7 6	
"	J. Whitehead and Sons, printers, Leeds.	" "	Neglecting to keep a record of overtime -	1 0 0	0 7 6	
"	Leeds Daily News Co., Limited, printers, Leeds.	" "	Employing two young persons after 4 o'clock on a Saturday afternoon.	- -	0 8 0	Withdrawn on payment of costs, as they were being employed on the belief that special exception under Section 59 applied to the works.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
May 12	Roberts & Co., sign writers, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Employing two young persons after 7 p.m. -	2 0 0	0 13 0	
„ 18	F. Corp, tailor, Hull - -	C. E. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Neglecting to affix an Abstract in his workshop.	0 5 0	0 5 0	
„	Stoole and White, printers, Hull.	„ „	Neglecting to limewash their factory within 14 months from the date when last limewashed.	1 0 0	0 5 0	
June 2	Waller and Richardson, dressmakers, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Employing three women after 4 p.m. on Saturday, May 20th.	6 0 0	0 18 0	
„	T. Kennedy, milliner, Leeds -	„ „	Employing two women after 10 p.m. on Saturday, May 13th.	4 0 0	0 15 0	
„	Mrs. Woolman, dressmaker, Leeds.	„ „	Employing two women after 4 p.m. on Sunday, May 14th.	4 0 0	0 8 0	
„	C. Freeman, tailor, Leeds -	„ „	Employing five women before 8 a.m. on Thursday, May 11th.	5 0 0	1 17 6	
„	J. Frais, tailor, Leeds - -	„ „	Employing one woman before 8 a.m. on Thursday, May 11th.	1 0 0	0 7 6	
„	N. Zetchanvitch, tailor, Leeds	„ „	Employing three women before 8 a.m. on Thursday, May 11th.	1 10 0	1 2 6	
June 5	J. H. Fenner & Co., leather belt manufacturers, Hull.	C. E. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Neglecting to fence engine fly-wheel - -	1 0 0	0 5 0	
„	F. Needler, confectioner, Hull	„ „	Employing a young person after 10 p.m. -	0 10 0	0 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
June 5	G. Dawson, milliner, Hull -	C. E. Twiss, Esq., Stipendiary Magistrate, Town Hall, Hull.	Employing a woman after 4 p.m. on Thursday, being the day substituted for Saturday.	0 5 0	0 7 0	
"	H. Hildyard, dressmaker, Hull	" "	Employing a woman after 4 p.m. on Thursday. being the day substituted for Saturday.	0 5 0	0 7 0	
"	W. H. Heslop, dressmaker, Hull.	" "	Employing a woman after 4 p.m. on Thursday, being the day substituted for Saturday.	0 5 0	0 7 0	
"	Maw, Till, and Kirke, Limited, dressmakers, Hull.	" "	Employing a woman after 4 p.m. on Thursday, being the day substituted for Saturday.	- -	0 5 6	As Saturday was given as a half-day, they were convicted in costs only.
"	W. Lison, cabinet maker, Hull.	" "	Neglecting to exhibit an Abstract in his factory.	0 10 0	0 5 0	
"	J. L. Harrison, whitesmith, Hull.	" "	Neglecting to exhibit an Abstract in his factory.	0 10 0	0 5 0	
"	Stratford & Co., cabinet maker, Hull.	" "	Neglecting to exhibit an Abstract in his factory.	0 10 0	0 5 0	
" 16	Albrecht and Albrecht, clothiers, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Neglecting to keep a record of overtime -	2 10 0	0 7 6	
"	T. Hogan, boot manufacturer, Leeds.	" "	Employing a young person for more than seven days without being certified.	1 0 0	0 7 6	
"	Jas. Haigh, whitesmith, Leeds	" "	Employing a young person after 6 p.m. -	0 10 0	0 7 6	
" 23	D. Payne & Co., machinists, Leeds Road, Otley.	A. Fox, J.P., and Wm. Fison, J.P., Esqs., Otley Petty Sessions.	Neglecting to send notice to H.M. Inspector of their having commenced to occupy a factory within one month.	0 5 0	0 6 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
July 17	Miss Terry, dressmaker, Scarboro'.	Alderman Champney and L. Walker, Esq., Scarboro' Town Hall.	Neglecting to affix an Abstract in her workshop.	- -	0 5 6	Convicted in costs only.
"	W. Rowntree and Sons, dressmakers, Scarboro'.	" "	Neglecting to keep a record of overtime -	- -	0 9 0	
"	A. J. Lowe, engineer, Scarboro'.	" "	Neglecting to affix an Abstract in his factory -	- -	0 5 6	By consent I withdrew this case on payment of costs, as I thought it preferable to having it dealt with as above.
"	John Blackburn, saw mill, Scarboro'.	" "	Neglecting to send notice to H.M. Inspector that he had begun to occupy a factory.	0 5 0	0 9 6	
"	" "	" "	Neglecting to fence his steam engine, fly wheel, and crank.	0 10 0	0 6 0	
" 29	Malton Biscuit Co., Limited, biscuit manufacturers, Malton.	T. J. Kinnear, Esq., and Dr. Colley.	Employing two young persons without being registered.	- -	0 8 0	The Magistrates thought as the secretary of the company promised in future to be more careful, that a conviction in costs only would be sufficient. I pressed for a penalty if only a small one, as the firm had been cautioned a year ago about a similar offence, but to no purpose.
"		" "	Employing same without being certified -	- -	0 8 0	
Sept. 11	R. W. Thompson, woollen manufacturers, Burley Vale Mills, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Neglecting to fence the side straps and pulleys of his carding machines.	4 16 0	0 4 0	
"	D. Briggs, woollen manufacturer, Burley Vale Mills, Leeds.	" "	Neglecting to fence the side straps and pulleys of his carding machines.	4 16 0	0 4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leeds District*—cont.	£ s. d.	£ s. d.	
Sept 18	Boyes and Hellawell, woollen manufacturers, Albion Mill, Morley.	Samuel Stockdale (Mayor), Samuel Rhodes, and E. F. Scholes, Esqs., Morley Police Court.	Neglecting to send notice to H.M. Inspector that they had occupied a factory.	0 5 0	0 14 6	As these were the first cases heard in this court the penalties were not so heavy as they otherwise would have been.
"	Wm. Scarth, woollen manufacturer, Albion Mill, Morley.	" "	Neglecting to fence certain dangerous machinery, to wit, the pulleys and straps of some scribblers and condensers.	1 0 0	0 8 6	
"	Jos. Muff, woollen manufacturer, Albion Mill, Morley.	" "	Neglecting to limewash the tops of his factory within 14 months from the last date that they were limewashed.	0 5 0	0 8 6	
"	J. Mitchell (owner only), Albion Mill, Morley.	" "	Neglecting to securely fence the fly wheel of his engine.	- -	0 5 0	Mr. Mitchell wrote to me on receiving his summons to say he did the fencing immediately after my visit. I therefore consented to withdraw on Mr. Mitchell's paying the costs.
Oct. 20	Jas. Henry, boot manufacturer, Leeds.	Wm. Bruce, Esq., Stipendiary Magistrate, Town Hall, Leeds.	Employing two young persons for more than seven days without certificates of fitness.	2 0 0	0 15 0	
" 27	Leeds Patent Brick Co., Leeds	" "	Employing one young person under 16 years of age for more than seven days without a certificate of fitness.	1 0 0	0 6 0	
"	Marion et Cie., milliners, Leeds	" "	Employing one woman after 4 p.m. on a Saturday.	1 10 0	0 6 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Bradford District.*		£. s. d.	
Dec. 14	H. and J. Wear, confectioners, 9, North Parade, Bradford.	Charles Skidmore, Stipendiary Magistrate, and W. H. Dewhirst, Esqs., Town Hall, Bradford.	Neglecting to hang up Abstract - -	- -	0 4 0	
"	Henry Harrison, confectioner, 202, Manningham Lane, Bradford.	" "	Neglecting to give notice of commencement of workshop.	- -	0 4 0	
"	" "	" "	Employing two young persons about 7 p.m. in workshop.	- -	0 4 0	
1893.						
Jan. 16	Angelina Gill, dressmaker, 36, Harris Street, Bradford.	C. Skidmore, Esq. (Stipendiary Magistrate), and W. H. Townend, Esq., Town Hall, Bradford.	Neglecting to hang up Abstract at the entrance to workshop.	- -	0 4 0	
"	Julius Stead, wool comber, Valley Mills, Bradford.	" "	Neglecting to report to the Factory Inspector and certifying surgeon an accident of such a nature as to prevent the person injured from returning to his work within 48 hours after the occurrence of the accident.	0 10 0	0 12 0	Or 14 days.
Feb. 3	Parkinson and Clark, dress and mantle makers, North Parade, Bradford.	Wm. Oddy and H. Ward, Esqs., Bradford Town Hall.	Neglecting to send notice of working overtime.	- -	0 6 0	Manageress away ill; no penalty inflicted.
"	" "	" "	Neglecting to hang up and fill up record of overtime.	- -	0 6 0	The first case under this section; so costs only.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bradford District*—cont.	£ s. d.	£ s. d.	
Feb. 14	John Peel, Longside Lane Dyeworks, Horton.	C. Skidmore, Stipendiary, and W. Merilson, Esqs., Bradford Town Hall.	Being then and there the occupier of a certain factory, did employ two young persons without having obtained certificates of fitness from the certifying surgeon.	0 10 0	0 8 0	Or 14 days imprisonment.
,,	,, ,,	,, ,,	Being then and there the occupier of a certain factory, did neglect to keep in the prescribed form, and with the prescribed particulars, registers of Henry Crowther and Alfred White, two young persons employed in the said factory.	0 10 0	0 8 0	
,,	Fieldhouse and Jowitt, "Fieldhead" Dyeworks.	,,	Being then and there the occupiers of a certain factory, did neglect to affix at the entrance of the said factory the prescribed Abstract of the Factory and Workshops Act, 1878.	0 10 0	0 8 0	
,,	William Wright, Albert Shed, weavers, Lister Hills, Horton.	,, ,,	Being then and there the occupiers of a certain factory did neglect to limewash the walls, ceilings, and tops of such factory within 14 months from the period when last limewashed.	0 10 0	0 8 0	
,, 28	Josh. Cooper, junr., wool comber, Frederick Street Mill, Bradford.	C. Skidmore, Stipendiary, and J. A. Godwin, Esqs., Bradford Town Hall.	Neglecting to fence the openings of his hoist -	2 0 0	0 8 0	
Mar. 26	Pearson and Foster, worsted manufacturers, Eccleshill.	Col. Hirst, C.B., and E. P. Arnold-Foster, Esq., Bradford County Court.	Neglecting to fence a dangerous part of machinery, viz., the shuttle of a loom, by the flying of which a weaver, Clara Crane, lost her eye.	-	0 15 0	The Bench considered this a test case, and fined the defendant in costs, and the shuttles to be fenced in six months. Another reason for costs only was, that this firm had not been previously warned to provide shuttle guards.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bradford District*—cont.	£ *s.* *d.*	£ *s.* *d.*	
Mar. 30	Jno. Shaw Co., Limited, dyeing, Leeds Road Works, Bradford.	C. Skidmore, Stipendiary, and W. W. Wood, Esqs., Bradford Town Hall.	Neglecting to hang up Abstract of the Factory Act.	0 5 0	0 14 0	
"	" "	" "	Employing three young persons not having their names entered on the register.	0 10 0	0 16 0	
"	Wm. Walker, wooden case maker, Providence Works.	" "	Neglecting to report an accident to James Fletcher, whereby the injured man has by lapse of time lost all opportunity of claim under the Employer's Liability Act.	1 0 0	0 8 0	
Apr. 6	M. Walker and Co., worsted spinners, Hammerton Mills, Bradford.	" "	Employing four young persons not having obtained certificates of fitness.	0 5 0	0 8 0	Or seven days.
"	" "	" "	Also employing the same four young persons not having their names entered in register.	0 5 0	0 8 0	
" 18	Richard Pease, brass founder, Horton Lane, Bradford.	" "	Neglecting to limewash his factory within 14 months of last date of limewashing.	1 0 0	0 8 0	
May 6	Robinson Bros., chemical works, Knottingley.	W. F. Tempest and J. F. Leatham, Esqs., Pontefract County Court.	Neglecting to hang up the Abstract of the Factory Acts.	0 12 6	0 7 6	
" 10	Johnson Bros., Potter Grange, Goole.	R. Creyke, Esq., and Hon. A. M. Hood, Goole Court House.	Neglecting to hang up the Abstract of the Factory Act.	0 1 0	0 12 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bradford District*—cont.	£ s. d.	£ s. d.	
May 10	Johnson Bros., Potter Grange, Goole.	R. Creyke, Esq., and Hon. A. M. Hood, Goole Court House.	Employing two young persons without having obtained surgeon's certificates.	- -	0 9 0	Costs only.
„	„ „	„ „	Neglecting to register the names of same young persons.	- -	0 8 0	(Costs only.)
„ 11	Smales Bros., worsted manufacturers, Folly Hall Mill, Wibsey.	T. Peel and E. P. Arnold-Foster, Esqs., Bradford County Court.	Neglecting to limewash their factory within 14 months of last date of limewashing.	1 0 0	0 7 6	
„ 12	Wm. Wright, worsted manufacturer, Lister Hills.	Charles Skidmore, Stipendiary Magistrate, and W. Dewhirst, Esqs., Bradford Town Hall.	Neglecting to send notice to the Factory Inspector and certifying surgeon of an accident which happened to one Mary Laycock, whilst employed in factory.	1 0 0	0 12 0	Or 10 days.
„	„ „	„ „	Neglecting to fence a certain dangerous part of the machinery, to wit, shuttles.	0 0 0	0 10 0	Order made to provide efficient shuttle guards within six calendar months.
„	The Bradford Co-operative Society, Limited, dressmakers, Bridge Street.	„ „	Neglecting to fill up record of overtime of certain persons employed in a certain workshop.	0 5 0	0 8 0	Or seven days.
„	„ „	„ „	Neglecting to hang up at the entrance of workshop, Abstract of the Factory and Workshops Act, 1878.	0 5 0	0 8 0	(Or seven days.)
„	Wm. Ward, worsted manufacturer, Cannon Shed, Bradford.	„ „	Neglecting to fence a certain dangerous part of machinery, to wit, shuttles.	- -	0 10 0	Order made to provide efficient shuttle guards within six calendar months.
„	Hy. Sewell and Sons, timber merchants, Drewton Street, Bradford,	„ „	Neglecting to fence off double crank arms of horizontal saw and crank shaft of engine in such factory.	0 10 0	0 8 0	Or 10 days.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bradford District*—cont.	£ s. d.	£ s. d.	
May 12	Jane Morgan, dressmaker, 129, Godwin Street.	Charles Skidmore, Stipendiary Magistrate, and W. Dewhirst, Esqs., Bradford Town Hall.	Employing young persons after 8 p.m.	0 5 0	0 8 0	Or seven days.
"	" "	" "	Neglecting to fill up record of overtime	0 5 0	0 8 0	
"	Frederick Whitehead, chair maker, Gordon Street.	" "	Neglecting to hang up Abstract of Factory Act, 1878.	0 2 6	0 8 0	
"	" "	" "	Neglecting to keep in the prescribed form a register of employment of young persons.	0 2 6	0 8 0	
"	" "	" "	Employing young persons without having obtained certificates of fitness.	0 2 0	0 8 0	
"	John Wm. Waite, brick maker, 175, Birch Lane.	" "	Neglecting to keep in the prescribed form a register of employment of young persons.	0 5 0	0 8 0	Or 10 days.
"	" "	" "	Employing two young persons without having obtained certificates of fitness.	0 5 0	0 8 0	
"	Joseph Benn and Sons, spinners, Great Horton.	" "	Allowing six young persons to clean looms during the dinner hour.	0 2 6	0 8 0	Or seven days.
"	Edward Smith & Co., worsted weavers, Bank Foot.	" "	Neglecting to fence certain parts of machinery, to wit, shuttles, such shuttles not being in such a position as to be equally safe to persons employed in the factory.	- -	0 14 0	Order made to provide efficient shuttle guards within six calendar months.
" 31	A. and E. Turner, bakers, Bishopgate.	Wm. Nicholson and B. Watson, Esqs., Wakefield Town Hall.	Neglecting to hang up the Abstract of the Workshops Act.	0 1 0	0 7 6	
"	" "	" "	Neglecting to give a weekly half-holiday	0 1 0	0 7 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893			*In the Bradford District*—cont.	£ s. d.	£ s. d.	
June 19	Robt. Ewbank, Eagle Works, Pontefract.	W. Mathers and J. Hillaby, Esqs., Pontefract Court House.	Employing several young persons without having entered their names in the Register.	0 5 0	0 8 6	
"	" "	" "	Also without having obtained surgeon's certificates for the above-mentioned young persons.	0 10 0	0 8 6	
" 21	Edwin Stansfield, Thornton Road Top, Bradford.	C. Skidmore and W. Dewhurst, Esqs., Town Hall, Bradford.	Neglecting to hang up Abstract of the Workshops Act.	- -	0 4 0	Had got the Abstract and all other notices immediately after my visit.
" 23	Thos. Armitage, Lofthouse Gate, Wakefield.	W. Lipscombe and J. H. Cookson, Esqs., Wakefield.	Employing three young persons without registering their names, and without surgeon's certificates.	—	—	Dismissed. Mr. Armitage swore that his servant, Jeremiah Wood, was the occupier, and engaged these boys, and that Wood made the bricks by contract for Armitage.
July 3	Joseph Ward, woollen manufacturer, Bottomfield Mill, Ossett.	Frederick Ellis and C. T. Phillips, Esqs., Dewsbury County Court.	Neglecting to fence the fly-wheel of an engine	2 0 0	0 6 6	
"	" "	" "	Neglecting to lime-wash his factory within 14 months of last date of lime-washing.	5 0 0	0 6 6	
Aug. 4	H. Seal & Co., stone cutters, Ingdale, Wakefield.	Dr. Campbell and J. Holdsworth, Esq., Wakefield County Court House.	Neglecting to hang up Abstract of Factory Act.	0 10 0	0 8 6	
"	J. J. Hurlbert, stone cutters, Ingdale, Wakefield.	" "	Neglecting to hang up Abstract of Factory Act.	0 10 0	0 8 6	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
				£ s. d.	£ s. d.	
1893.			*In the Bradford District—cont.*			
Oct. 20	Joe Appleyard, reed and heald maker, 105, Thornton Road, Bradford.	C. Skidmore, Stipendiary Magistrate, Town Hall, Bradford.	Being the occupier of a certain factory did employ therein one, Helena Whitehead, a child, without having obtained a certificate in the prescribed form of the fitness of such child for such employment.	0 5 0	0 8 0	Or 10 days.
1892.			*In the Huddersfield District.*			
Nov. 15	Robert Taylor and Sons, engineers, Marsden Foundry, Marsden, Huddersfield.	Edward Armitage, Alfred Walker, T. H. Bradbury, and T. J. Hirst, Esqs., West Riding Court House, Huddersfield.	Employing two young persons without having obtained certificates of their fitness.	2 0 0	1 9 0	
"	" "	" "	Neglecting to affix a copy of the prescribed Abstract of the Acts.	0 10 0	0 8 0	
" 19	J. F. and E. Whitteley & Co., cotton spinners, Britannia Mills, Brighouse.	T. H. Morris, C. Holdsworth, and J. Stansfeld, Esqs., and the Rev. G. E. Aspinall, West Riding Police Court, Halifax.	Employing three children, two young persons, and one woman during a time allowed for meals.	3 0 0	2 17 0	
" 26	J. Charnock and Sons, joiners, &c., Pellon Lane, Halifax.	J. W. Davis (Mayor), J. Bairstow, T. S. Scarborough, R. Horsfall, and T. S. Scott, Esqs., Halifax Town Hall.	Employing four young persons without having obtained certificates of their fitness.	1 0 0	1 14 0	
Dec. 2	Abel Cockroft and Sons, Limited, cotton spinners and cloth finishers, Fairfield Mills, Huddersfield.	Joseph Lowenthal and T. P. Crosland, Esqs., Town Hall, Huddersfield.	Failing to report an accident . . .	2 0 0	1 6 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Huddersfield District*—cont.	£ s. d.	£ s. d.	
Dec. 16	James Stoddart, hosier, Woolshops, Halifax.	J. W. Davis (Mayor), J. Bairstow, Esqs., and twelve others, Town Hall, Halifax.	Neglecting to affix the prescribed Abstract of the Act.	0 10 0	0 7 6	
"	" "	" "	Employing as a young person a child aged 12 years.	0 0 6	0 9 6	
" 20	Joseph Hoyle and Son, woollen manufacturers, Beaufort Mills, Low Westwood, Golcar.	R. Skilbeck, E. Armitage, T. H. Bradbury, and T. J. Hirst, Esqs., West Riding Police Court, Huddersfield.	Employing one woman and two young persons during a time allowed for meals.	1 10 0	3 2 0	
1893.						
Jan. 18	Joseph Hellawell and Sons, cloth finishers, Spring Place Mills, Huddersfield.	John Fligg Brigg, Frederick Greenwood, and Godfrey Sykes, Esqs., Huddersfield Town Hall.	Failing to allow to two young persons, during the lawful period of employment, the times for meals required by law.	1 10 0	1 5 0	
Feb. 18	John Hartley, letter-press printer, Park Street, Brighouse.	T. H. Morris, J. W. Ward, J. E. Shaw, J. Whitley, G. E. Aspinall, J. Wilson, and H. Sugden, Esqs., West Riding Police Court, Halifax.	Employing a young person under 16 years of age without having obtained a certificate of his fitness.	2 0 0	0 13 0	
"	James Reside, engineer, Park Street, Brighouse.	" "	Employing a young person under 16 years of age without having obtained a certificate of his fitness.	2 0 0	0 15 0	
"	John Wood and Sons, cotton spinners, Lock Hill Mills, Sowerby Bridge.	" "	Employing a young person and two children during a time allowed for meals.	3 0 0	1 15 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Huddersfield District*—cont.	£ s. d.	£ s. d.	
Feb. 27	J. C. Stott, joiner, &c., Wellington Street, Lindley, Huddersfield.	Reuben Hirst (Mayor), Alfred Walker, Fredk. Eastwood, Charles Glendinning, Wm. Marriott, and John Taylor, Esqs., Huddersfield Town Hall.	Employing a young person under 16 years of age without having obtained a certificate of his fitness.	0 10 0	0 12 6	
" 28	Taylor & Co., woollen manufacturers, Holme Mills, Golcar.	Wm. Wrigley, J. F. Brigg, and W. J. Kaye, Esqs., West Riding Police Court, Huddersfield.	Employing seven women and one young person after the end of the lawful period of employment.	3 0 0	3 9 6	
Mar. 25	John Lumb, cotton doubler, Valley Mills, Sowerby Bridge.	J. Whiteley Ward (Chairman), J. E. Champney, Wm. Ambler, C. Holdsworth, J. E. Shaw, and J. H. Baldwin, Esqs., West Riding Police Court, Halifax.	Employing a young person during a time stated for meals.	0 10 0	0 14 0	
"	Hirst Brothers, wiredrawers, Victoria Mills, Brighouse.	" "	Failing to obtain a certificate of the fitness of a young person under the age of 16 years.	0 10 0	0 14 0	
"	C. E. and F. Ramsden, cotton spinners, Prospect Mills, Sowerby Bridge.	" "	Employing two young persons during a time allowed for meals.	1 0 0	1 8 0	The defendants, through their solicitor, expressed their regret at the occasion, the first during a period of 30 years, of this action.
April 14	J. F. Bunney, milliner, Northgate, Halifax.	T. S. Scarborough, R. Horsfall, T. S. Scott, and W. Gaukroger, Esqs., Halifax Town Hall.	Failing to affix a copy of the prescribed Abstract of the Acts.	2 0 0	0 8 6	
"	" "	" "	Employing two women after the end of the ordinary period of employment, without having forwarded and affixed the requisite notices of his intention to avail himself of the overtime exception.	2 0 0	0 19 0	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Huddersfield District*—cont.	£ s. d.	£ s. d.	
April 14	Maud and Turner, engineers, Perseverance Works, Gibbet Street, Halifax.	T. S. Scarborough, R. Horsfall, T. S. Scott, and W. Gaukroger, Esqs., Halifax Town Hall.	Employing a young person under 16 years of age without having obained a certificate of his fitness.	1 0 0	0 8 6	
"	David Hanson & Co., underclothing manufacturers, Akroyd Place, North Parade, Halifax.	" "	Employing three young persons under 16 years of age without having obtained certificates of their fitness.	3 0 0	1 2 6	
" 15	Fred Helliwell, operative cotton spinner at Messrs. H. and J. Sugden's George Street Mills, Brighouse.	T. H. Morris, W. Ambler, C. Holesworth, G. E. Aspinall, and C. Clay, Esqs., West Riding Police Court, Halifax.	Employing a child during a time allowed for meals.	0 10 0	1 2 6	
"	Allen Marsden, operative cotton spinner at Messrs. H. and J. Sugden's George Street Mills, Brighouse.	" "	Employing a young person during a time allowed for meals.	0 10 0	0 13 0	
"	Thomas Stott, operative cotton spinner at Messrs. R. and J. Holroyd's Springwood Mills, Holywell Green.	" "	Employing a young person during a time allowed for meals.	0 10 0	0 18 0	
May 12	Eli Horsfall, worsted coating manufacturer, Stannary Mills, Halifax.	T. S. Scarborough, R. Horsfall, J. Bairstow, T. S. Scott, and T. Whitaker, Esqs., Borough Police Court, Halifax.	Employing a young person without having entered her name on the prescribed Register.	1 0 0	0 9 6	
"	" "	" "	Employing a child without obtaining the necessary school attendance certificates.	1 0 0	0 9 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Huddersfield District*—cont.	£ s. d.	£ s. d.	
May 12	Wm. Wilkinson & Co., electrical engineers, Crosshills, Halifax.	T. S. Scarborough, R. Horsfall, J. Bairstow, T. S. Scott, and T. Whitaker, Esqs., Borough Police Court, Halifax.	Neglecting to keep affixed the prescribed Abstract of the Factory Acts.	0 10 0	0 8 6	This occupier had failed to notify H.M. Inspector of his new occupation of premises.
„ 13	Barkers and Butterworth, silk spinners, Belle Vue Mills, Bailiff Bridge, near Brighouse.	T. H. Morris, J. W. Ward, J. Whiteley, G. E. Aspinall, J. Wilson, and H. Sugden, Esqs., West Riding Police Court, Halifax.	Allowing two women to remain during a time allowed for meals, in a part of a factory for gassing silk.	2 0 0	1 7 0	
July 11	Robert Taylor and Son, mungo manufacturers, Town End Mills, Golcar.	Jos. A. Armitage, R. Skilbeck, C. W. Keighley, J. F. Brigg, W. J. Kaye, and Jos. Crowther, Esqs., West Riding Police Court, Huddersfield.	Employing a young person under 16 years of age without having obtained a certificate of her fitness.	[illegible] [illegible] 0	0 12 0	
„ 15	Clay and Horsfall, worsted spinners, Wharf Mills, Sowerby Bridge.	J. Whiteley Ward, Wm. Ambler, J. Stansfield, J. Whiteley, G. E. Aspinall, J. Wilson, H. Sugden, and J. J. A. Riley, Esqs., West Riding Police Court, Halifax.	Employing a young person during a time allowed for meals.	0 10 0	0 14 0	
„	J. Shaw & Co., paper manufacturers, New Mills, Barkisland.	„ „	Failing to affix in their works a copy of the prescribed Abstract of the Act.	0 10 0	0 7 6	
„ 21	J. Culpan and Sons, dressmakers, &c., Cross Hills, Halifax.	Wm. Barstow, B. W. Jackson, J. G. Wheelwright, and F. Patchett, Esqs., Halifax Town Hall.	Employing two females at night without posting and affixing the requisite overtime notices.	0 10 0	0 19 0	
„	Asquith and Waddington, dressmakers, &c., Old Market, Halifax.	„ „	Employing two females at night without posting and affixing the requisite overtime notices.	0 10 0	1 0 0	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Huddersfield District*—cont.	£ s. d.	£ s. d.	
Aug. 19	G. and A. Smith, milliners, &c., Commercial Street, Brighouse.	T. H. Morris, A. Arnold, Wm. Ambler, J. W. Clay, J. E. Shaw, J. Whiteley, and J. J. A. Riley, Esqs., West Riding Police Court, Halifax.	Employing two female young persons at night.	1 0 0	1 5 0	
"	Miss Ruth Shaw, dressmaker, Commercial Street, Brighouse.	" "	Employing a woman and a female young person after the end of the lawful period of employment.	1 0 0	1 5 0	
"	George Lumb, Limited, cotton spinners, Wellington Mills, Elland.	" "	Employing a woman and a female young person during a time allowed for meals.	2 0 0	1 5 0	
"	N. Whiteley and Sons, cotton spinners, Chapelfield Mills, Ripponden.	" "	Employing three women and a female young person during a time allowed for meals.	4 0 0	2 18 0	
" 21	Mellor Brothers, cotton spinners, Holme Mills, Bradley, Huddersfield.	J. E. Willans and G. W. Tomlinson, Esqs., Huddersfield Town Hall.	Employing three children on two successive Saturdays.	1 10 0	1 19 0	
Oct. 4	Joseph Lumb and Sons, Limited, worsted spinners, Folley Hall, Huddersfield.	J. F. Brigg, D. Midgley, and J. A. Wrigley, Esqs., Huddersfield Town Hall.	Employing a young person after the end of the lawful period of employment.	2 0 0	0 10 3	
"	" "	" "	Employing a young person under 16 years of age without having obtained a certificate of his fitness.	2 0 0	0 10 3	
" 7	Wm. Brook, operative cotton spinner, working for Messrs. Blackburn, Smith & Co., Woodvale Mills, Brighouse.	Alfred Arnold, Wm. Ambler, J. E. Shaw, J. Whiteley, G. E. Aspinall, H. Sugden, and J. J. A. Riley, Esqs., West Riding Police Court, Halifax.	Employing a young person before the beginning of the specified period of employment.	0 10 0	0 14 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Huddersfield District*—cont.	£ s. d.	£ s. d.	
Oct. 7	Tom Brooks, operative cotton spinner, working for Messrs. Blackburn, Smith & Co., Woodvale Mills, Brighouse.	Alfred Arnold, Wm. Ambler, J. E. Shaw, J. Whiteley, G. E. Aspinall, H. Sugden, and J. J. A. Riley, Esqs., West Riding Police Court, Halifax.	Employing a child before the beginning of the specified period of employment.	0 10 0	0 11 6	
"	J. Wood and Sons, cotton spinners, Lock Hill Mills, Sowerby Bridge.	" "	Allowing a child to work between the fixed and traversing parts of a self-acting machine in motion by the action of steam power.	0 10 0	1 0 6	It being proved that when the offence was committed the spinner under whose care the child was working was away from his work through illness, the Bench were evidently disposed to deal leniently with this case. Under these circumstances H.M. Inspector refrained from drawing their attention to the provisons of Section 28 of the Act of 1891.
" 9	Fredk. Wm. Hutton, Victoria Dye Works, Queen Street, Huddersfield.	Alderman R. Hirst (Mayor), and Sir Jos. Crosland, M.P., Huddersfield Town Hall.	Employing three women after the end of the lawful period of employment on Saturday.	0 15 0	1 6 6	
" 28	Joseph Wood and Sons, Limited, worsted spinners, Hipperholme Mills, Hipperholme.	T. H. Morris, J. W. Clay, G. E. Aspinall, J. Wilson, H. Sugden, J. J. A. Riley, and R. Shaw, M.P., Esqs., West Riding Police Court, Halifax.	Failing to obtain a certificate of a child's school attendances.	1 0 0	0 12 6	
"	" "	" "	Failing to obtain a certificate of the fitness for employment of a child.	1 0 0	0 12 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Burnley District.*	£ s. d.	£ s. d.	
Nov. 12	Moorhouse and Wildman, machinists, Sackville Street, Skipton.	J. Coulthurst and J. Slingsby, Esqs., Town Hall, Skipton.	Failing to keep affixed an Abstract of the Factory Act.	0 5 0	0 9 0	
" 16	Wm. Lawson, boot maker, 68, Parliament Street, Burnley.	Alderman Howarth, and J. S. Veevers, Esqs., Town Hall, Burnley.	Failing to keep affixed an Abstract of the Factory and Workshops Act.	· ·	0 10 0	10s., including costs.
" 17	Dan. Greenwood & Co., clothiers, Hebden Bridge.	J. A. Ingham, and D. J. Crossley, Esqs., Town Hall, Todmorden.	Failing to keep prescribed particulars of over-time.	0 5 0	0 9 0	
"	R. Sutcliffe & Co., clothiers, Hebden Bridge.	" "	Failing to keep prescribed particulars of over-time.	0 5 0	0 9 0	
" 30	Thos. Fryer & Co., sugar boilers, Chapel Street, Nelson.	W. F. Ecroyd, and R. Handsley, Esqs., Police Court, Colne.	Employing a young person after 6 p.m.	0 10 0	0 13 0	
Dec. 1	Stead and Fielding, dyers, Lee Mill, Hebden Bridge.	J. A. Ingham, and D. J. Crossley, Esqs., Town Hall, Todmorden.	Failing to report occupation of a factory	0 5 0	0 9 0	
" 24	William Overend, cabinet maker, Cononley, Skipton.	J. Coulthurst, and J. Slingsby. Esqs., Town Hall, Skipton.	Failing to keep affixed an Abstract of the Act	0 2 6	0 9 0	
" 28	John Williams & Co., manufacturers, Trafalgar Street, Burnley.	W. Parkinson (Mayor), and Alderman Greenwood, Town Hall, Burnley.	Allowing a child to clean machinery in motion	0 10 0	0 12 0	
"	" "	" "	Allowing a child to clean machinery in motion	· ·	0 6 6	
"	Sandygate Mill Co., Limited, spinners and manufacturers, Burnley.	" "	Allowing a child to clean machinery in motion	0 10 0	0 12 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Burnley District*—cont.	£ s. d.	£ s. d.	
Jan. 27	John Simpson, cabinet maker, Cook Lane, Keighley.	Benj. Briggs and Wm. Clough, Esqs., Keighley.	Failing to give notice of occupation of a workshop.	- -	0 8 0	Costs only.
" 28	James Dyson, manufacturers, Bradley Shed, Nelson.	Alderman Wilkinson (Mayor) and William Tunstill, Esq., Town Hall, Nelson.	Employing two children during a meal time -	0 10 0	0 18 0	
"	" "	" "	Employing a young person during a meal time.	0 5 0	0 9 0	
"	Hartley & Co., Limited, manufacturers, Albert Shed, Nelson.	" "	Employing a child during a meal time -	0 5 0	0 9 0	
"	" "	" "	Employing a young person during a meal time	0 5 0	0 9 0	
Mar. 7	John Hartley, cotton spinner, Kirkby, Malham.	Rev. H. S. Swales and Hector Christie, Esq., Police Court, Settle.	Employing two young persons during a meal time.	2 0 0	0 16 0	20s. and costs each case.
"	John (or Wm.) Beck, wheelwright, Airton.	" "	Failing to give notice of occupation - -	- -	0 6 6	Withdrawn on payment of costs. Bench seemed disposed not to convict.
" 15	Franks and Oldham, brush makers, 27, Church Street, Burnley.	Alderman Baron and Thos. Hirst, Esq., Town Hall, Burnley.	Failing to produce a certificate of school attendance.	0 2 6	0 11 0	
" 16	Wilson Bros., Limited, bobbin makers, Cornholme.	J. A. Ingham and D. J. Crossley, Esqs., Town Hall, Todmorden.	Employing four young persons after 6 p.m. -	2 0 0	1 16 0	10s. and costs each case. Penalty utterly inadequate. It was admitted that these young persons had been employed seven days from 6 a.m. to 7.45 p.m. I asked for a heavy penalty.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Burnley District*—cont.	£ s. d.	£ s. d.	
April 12	Hartley and Petyt, engineers, Russell Street, Bingley.	Alfred Sharp, and J. B. Sharp, Esqs., Police Court, Bingley.	Failing to give notice of occupation of a factory.	- -	0 7 6	Withdrawn on payment of costs.
„ 13	Marshall and Stevenson, heald and reed makers, Hope Street, Todmorden.	J. A. Ingham, and D. J. Crossley, Esqs., Todmorden.	Failing to obtain certificate of fitness - -	0 5 0	0 9 0	
„	„ „	„ „	Failing to register name of the young person -	- -	0 6 6	Withdrawn on payment of costs.
May 1	John Simpson, manufacturer, Hapton.	Robert Handsley, and Geo. Sutcliffe, Esqs., Keighley Green, Burnley.	Failing to limewash within the prescribed period.	1 0 0	0 11 0	With a strong caution from the Bench.
„ 10	Wm. Mason, weaver, Scarlett Street, Burnley.	T. Edmondson and T. Hoghton, Esqs., Town Hall, Burnley.	Employing a child on a Saturday whose period of employment had exceeded five-and-a-half hours on another day during same week.	- -	0 9 0	Withdrawn on payment of costs. Defendant in poor circumstances.
June 2	Clapham Bros., ironfounders, Hawkholme Lane, Keighley.	W. L. Marriner and W. Weatherhead, Esqs., Police Court, Keighley.	Neglecting to fence a horizontal shaft, whereby a person was killed.	- -	- -	Firm, through their solicitors, agreeing to pay the widow the sum of 30*l.* and all costs, I had instructions from Captain May, R.N., to withdraw from the proceedings. Deceased's disregard of instructions, and carelessness, no doubt contributed very much towards the accident.
June 15	Walker Waddington, letter-press printer, Todmorden.	Rev. Thos. Sutcliffe, and D. J. Crossley, Esq., Todmorden.	Neglecting to record overtime - -	- -	0 5 0	Withdrawn on payments of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Burnley District*—cont.	£ s. d.	£ s. d.	
June 15	Walker Waddington, letter-press printer, Todmorden.	Rev. Thos. Sutcliffe, and D. J. Crossley, Esq., Todmorden.	Neglecting to limewash within the prescribed period.	0 10 0	0 7 6	
July 19	Henry Flowers, joiner, Trawden.	R. Shaw, and S. Catlow, Esqs., Police Court, Colne.	Failing to keep affixed an Abstract of the Act	- -	0 7 6	Fined in costs.
"	John Ellis, joiner, Trawden	" "	Failing to keep affixed an Abstract of the Act	- -	0 7 6	Fined in costs.
"	W. & S. Bannister, joiners, Trawden.	" "	Failing to give notice of occupation of a factory.	- -	0 7 6	Fined in costs.
"	Marsden and Company, manufacturers.	" "	Neglecting to limewash factory within the prescribed period of fourteen months.	1 0 0	0 12 0	
July 26	Burnley Self Help Spinning and Manufacturing Co., Limited, manufacturers, Burnley.	Alderman Parkinson (Mayor), and J. Rawlinson, Esq., Burnley Town Hall.	Employing a child during a meal time	0 10 0	0 11 0	
"	" "	" "	Employing a young person during a meal time.	- -	0 [illegible] 6	Ordered to pay costs. I asked for a penalty.
Aug. 1	James Rhodes and Son, chair makers, Castle Lane, Keighley.	Ira Ickringill, and James Clough, Esqs., Keighley Police Court.	Failing to keep affixed an Abstract of the Act	0 5 0	0 7 6	
" 8	Rose Mill Co., manufacturers, Higham.	Wm. Dugdale, and Robert Handsley, Esqs., County Police Court, Burnley.	Allowing three children, three young persons and four women to remain in a room during a meal time in which a manufacturing process was going on.	3 0 0	3 8 6	Full penalty in one case, others withdrawn on payment of costs. Small firm.
" 9	Hartley Tatham & Co., manufacturers, Elm Street, Burnley.	Alderman Greenwood, and J. S. Veevers, Esq., Town Hall, Burnley.	Failing to limewash within the prescribed period, fourteen months.	2 0 0	0 11 0	I asked for a substantial penalty. Mill very dirty.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Burnley District*—cont.	£ s. d.	£ s. d.	
Sept. 2	Crabtree and Whitehead, manufacturers, Union Shed, Skipton.	John Coulthurst, and J. H. Dewhurst, Esqs., Town Hall, Skipton.	Failing to limewash factory within the prescribed period of fourteen months.	0 10 0	0 10 0	
" 15	John Wm. Greenwood, milliner, Haworth, near Keighley	Col. Sugden, and Prince Smith, Esq., Police Court, Keighley.	Failing to keep affixed an Abstract of the Act	- -	0 7 6	Ordered to pay costs.
"	Nathan Wright, wheelwright, Haworth.	" "	Failing to keep affixed an Abstract of the Act	- -	0 7 6	Ordered to pay costs.
"	Jas. Rushworth, joiner, Haworth.	" "	Failing to give notice of occupation of factory.	0 5 0	0 7 6	
" 27	R. Hyde and Sons, letter-press printers, Exchange Street, Colne.	H. Tunstill, and S. Catlow, Esqs., Colne Police Court.	Employing a young person after 10 p.m.	0 10 0	0 18 0	
"	Isaiah Smallpage, spinner and manufacturer, Burnley.	Wm. Parkinson Esq. (Mayor), and Alderman Thornber, Burnley Town Hall.	Allowing two children, one young person, and seven women to remain in a room during a meal time in which a manufacturing process was going on.	1 0 0	3 1 0	20s. and costs in one case. Costs in remainder.
"	Geo. Lord, operative spinner, Bishop Street, Burnley.	" "	Allowing a young person to work between the fixed and traversing parts of a machine whilst in motion.	- -	0 6 6	Convicted in costs.
" 30	Herbert Veevers, boot maker, 134, Scotland Road, Nelson.	John Wilkinson (Mayor), and L. Clement, Esqs., Nelson Town Hall.	Failing to give notice of occupation of a workshop.	- -	0 9 0	Convicted in costs.
Oct. 2	Padiham Spinning Co., Limited, cotton spinners, Padiham.	Alderman Baron, R. Thompson, and James Stevenson, Esqs., Police Court, Keighley Green, Burnley.	Neglecting to limewash ceilings of the factory within the prescribed period of fourteen months.	2 0 0	0 12 0	False entry made in factory Register.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Burnley District*—cont.	£ s. d.	£ s. d.	
Oct. 18	J. R. Cooper & Co., manufacturers, Scar Top, Burnley.	Alderman Greenwood, and F. J. Grant, Esq., Burnley Town Hall.	Allowing a woman to work during part of the time allowed for meals.	0 10 0	0 12 0	
"	John Cubbon, boot and shoe maker, Oxford Road, Burnley.	" "	Failing to keep affixed an Abstract of the Workshops Act.	- -	0 6 6	Fined in costs.
"	Richard Berry, engineer, Hill Top Street, Burnley.	" "	Failing to give notice of occupation of a factory.	- -	0 6 6	Fined in costs.
" 21	James Gott, ropemaker, Manchester Road, Nelson.	Alderman Whitaker, and F. L. Clement, Esq., Nelson Borough Police Court.	Failing to fence a gas engine - -	0 5 0	0 9 0	Engine now fenced.
Oct. 31	James Lee Crabtree, printer, 13, Changegate, Keighley.	Ira Ickringill and Prince Smith Esqs., Keighley Police Court.	Failing to limewash within the prescribed period of fourteen months.	0 2 6	0 6 6	
1892.			*In the Rochdale District.*			
Nov. 9	Healey Mill Co., cotton manufacturers, near Rochdale.	James Brierley, and L. Shawcross, Esqs., Town Hall, Rochdale.	Employing ten females during a time allowed for meals on 18th October 1892.	2 10 0	3 10 0	
" 10	Thomas Ashworth, joiner, &c., Bury.	Robert Peers, and Joseph Burrow, Esqs., Police Court, Bury.	Employing two children for more than seven days, without certificates of fitness on 21st October.	0 10 0	0 17 0	
"	John Wolstenholme, confectioner, Bury.	" "	Employing two young persons and one child for more than seven days without certificates of fitness on 21st October.	0 3 0	4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Rochdale District*—cont.	£ s. d.	£ s. d.	
Nov. 10	John Newton, bleach works, Walmersley, near Bury.	J. Whittaker, Esq., Dr. Fletcher, County Police Court, Bury.	Neglecting to report an accident on 7th September 1892.	1 0 0	0 12 0	
„ 16	E. Ashworth & Co., woollen manufacturers, Cowper, near Bacup.	Wm. Mitchell, and J. Howarth, Esqs., Police Court, Bacup.	Employing two young persons for more than thirteen days without certificates of fitness.	1 0 0	1 4 0	
1893.						
Jan. 11	E. Clegg and Sons Limited, cotton manufacturers, Littleborough.	Joseph Brierley, and Thomas Smithson, Esqs., Town Hall, Rochdale.	Allowing a child to clean machinery in motion on 2nd December 1892.	1 0 0	0 12 0	
„ 12	Robert Spencer, hat manufacturer, Limefield, near Bury.	Thomas Briggs, James Byrom, and Joseph Newbold, Esqs., Police Court, Bury.	Neglecting to exhibit the prescribed Abstract in his factory on 30th November 1892.	- -	0 5 0	Penalty 5s. including costs. The defendant has occupied this factory above three years and had not reported in accordance with Section 75. He had also been a partner in another firm previously. The Chairman said that the Bench were of opinion the Factory Department had been very remiss in not having discovered these works before now, and in order to emphasise this, they inflicted the above small penalty. The costs were 9s., but I was informed by the clerk that the balance would not be charged.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Rochdale District*—cont.	£ s. d.	£ s. d.	
Mar. 1	Silas Worthington, roller coverer, Oldham.	Dr. Platt, and Thomas Taylor, Esq., Town Hall, Oldham.	Employing three young persons after legal hours on 8th February 1893.	1 0 0	1 4 0	The defendant was convicted at this court for a similar offence on March 19th, 1892. Although I proved the previous conviction, and drew the attention of the Bench to Section 28, Act of 1891, and submitted that it applied to each of the three cases, they imposed a penalty of 1*l.* in one case and costs in all.
April 5	Healey Bros., twine manufacturers, Heywood.	T. Isherwood, D. Marlor, Esqs., and Dr. Torrop, Police Court, Heywood.	Employing seven females during a meal time on 10th March 1893.	0 10 0	3 1 6	Penalty 5*s.* each in first two cases, costs in all.
" 6	J. Olive & Co., railway waggon works, near Bury.	Dr. Fletcher, and E. W. Mellor, Esq., Bury.	Employing three young persons for more than 13 days without certificates of fitness on 6th March 1893.	1 0 0	1 5 0	Fined 1*l.* in one case and costs in all.
" 13	R. & S. Alcock, cotton manufacturers, Bury.	John Hall, and Thomas Holt, Esqs., Police Court, Bury.	Allowing a child to clean machinery in motion on 24th March.	0 5 0	0 8 0	
May 3	James E. Knott, cotton manufacturer, Waterhead, near Oldham.	E. Schofield, and Thos. Taylor, Esqs., Town Hall, Oldham.	Employing three women and two young persons during a meal time on 11th April.	1 5 0	2 0 0	
" 19	Eagle Spinning Co., Limited, Rochdale.	A. Brierley, Alex. Molesworth, and Jas. Cheetham, Esqs., Police Court, Rochdale.	Employing three children and one young person before 6 a.m. on 27th April.	4 4 0	1 8 0	
June 7	Samuel O'Neill, cotton manufacturer, Castleton, near Rochdale.	F. G. Crowther, and A. Brierley, Esqs., Town Hall, Rochdale.	Employing eight young persons after legal hours on Saturday, 6th May 1893.	0 10 0	3 4 6	10*s.* fine in one case, costs in all.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Rochdale District.*—cont.	£ s. d.	£ s. d.	
June 7	Mutual Spinning Co., Limited, cotton spinners, Heywood.	Thos. Isherwood, Esq., and Dr. Torrop, Police Court, Heywood.	Employing five females after the legal time on 3rd May 1893.	0 10 0	2 6 6	Fined 5*s.* in two cases, costs in all.
" 8	Thos. Hardman and Sons, cloth manufacturers, Bury.	John Ashworth, and Joseph Burrows, Esqs., Police Court, Bury.	Neglecting to limewash the factory within the prescribed time.	0 10 0	0 9 0	
"	Bury Commercial Co., Limited, cotton manufacturers, Tottington, near Bury.	J. Whittaker, Esq., and Dr. Fletcher, County Police Court, Bury.	Neglecting to report an accident.	0 10 0	0 12 0	
" 19	The Yew Mill Co., Limited, cotton spinners, Heywood.	David Marlor, and Benjamin Buckley, Esqs., Police Court, Heywood.	Employing five young persons during the breakfast time on 9th June.	0 10 0	2 6 6	Penalty 5*s.* each in two cases, costs in all.
"	Rothwell & Co., dressmakers, Bury.	Robert Peers, and Joseph Burrows, Esqs., Police Court, Bury.	Employing two female young persons before the legal time on 23rd May.	1 0 0	0 11 0	
" 21	Mrs. C. Chadwick, dressmaker, Whitworth, near Rochdale.	James Brierley, and A. Brierley, Esqs., Town Hall Rochdale.	Employing one woman and one young person after 4 p.m. on Saturday, 3rd June 1892.	0 5 0	1 4 0	
"	Sevilles, Limited, cotton manufacturers, Royton.	R. Mellor, John T. Clegg, and A. Butterworth, Esqs., Police Court, Royton.	Employing three children during a meal time on 7th June.	1 10 0	1 16 0	
"	Cooper & Co., cotton spinners, Royton.	" "	Employing five females during a meal time on 7th June.	2 10 0	3 0 0	
Aug. 3	E. T. Eastwood, cabinet maker, Rawtenstall.	John B. Whitehead, Wm. Brooks, and J. H. Hardman Esqs., Police Court, Rawtenstall.	Neglecting to affix the prescribed Abstract on 18th July.	0 5 0	0 12 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Rochdale District*—cont.	£ s. d.	£ s. d.	
Aug. 3	James Hill, slipper manufacturer, Waterfoot.	John B. Whitehead, Wm. Brooks, and J. H. Hardman, Esqs., Police Court, Rawtenstall.	Employing four young persons during the dinner hour on 18th July.	0 10 0	1 14 6	10s. fine in one case and costs in all.
" 7	Pearl Mill Co., Limited, cotton spinners, Oldham.	A. Crompton, Joseph Rowland, Esqs., Police Court Oldham.	Employing five women during a meal time on 21st July.	1 5 0	2 0 0	
" 9	Walter Spencer, hat manufacturer, Bury.	J. Halliwell, Esq., Alderman Meadowcroft, and J. H. Pickup, Esq., Police Court, Bury.	Employing one woman after the ordinary time without sending overtime notices on July 25th.	0 10 0	0 8 0	
"	Rothwell & Co., printers, Bury.	" "	Employing one young person after the legal time on July 24th.	0 10 0	0 8 0	
"	Brunskill and Crompton, printers, Bury.	" "	Employing one young person before the legal time on July 24th.	0 10 0	0 8 0	
" 10	Wm. Heywood, operative spinner, Oldham.	John Wild and T. Hawkins, Esqs., Police Court, Oldham.	Employing one young person during a meal time on July 28th.	0 5 0	0 8 0	
"	James Barker, operative spinner, Oldham.	" "	Employing one young person during a meal time on July 28th.	0 5 0	0 8 0	
"	Robert Lees, operative spinner, Oldham.	" "	Employing one young person during a meal time on July 28th.	0 5 0	0 8 0	
" 16	James Crompton, operative spinner, Oldham.	Dr. Platt, Thomas Taylor, and Edwin Schofield, Esqs., Police Court, Oldham.	Employing one young person during breakfast time on August 5th.	0 5 0	0 8 0	
"	John Warburton, operative spinner, Oldham.	" "	Employing one young person during breakfast time on August 5th.	0 5 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Rochdale District*—cont.	£ s. d.	£ s. d.	
Aug. 16	John Wild and Son, cotton manufacturers, Brighton Mill, Oldham.	Dr. Platt, Thomas Taylor, and Edwin Schofield, Esqs., Police Court, Oldham.	Employing two young persons during breakfast time on August 5th.	0 10 0	0 16 0	
"	" "	" "	Employing one young person for more than seven days without a certificate of fitness.	- -	0 5 6	Costs only.
" 17	Goodshawfold Manufacturing Co., Limited, Crawshawbooth.	T. H. Whitehead and J. E. Holt, Esqs., Police Court, Rawtenstall.	Employing a young person for more than thirteen days without a certificate of fitness.	0 5 0	0 12 0	
Sept. 6	Lowe and Capper, fustian cutters, Royton.	T. S. Hague and R. Mellor, Esqs., Police Court, Royton.	Occupying a factory for more than one month without sending notice to H.M. Inspector of Factories.	0 10 0	0 12 0	
" 13	John Kershaw, cloth finisher, Wardle.	James Brierley and J. H. Lancashire, Esqs., Rochdale Town Hall.	Employing two young persons more than seven days without certificates of fitness.	1 0 0	1 4 0	
" 14	The Globe Cotton-Spinning and Manufacturing Co., Limited, Crawshawbooth.	John B. Whitehead and James E. Holt, Esqs., Police Court, Rawtenstall.	Allowing two females to remain in a room during a time set apart for meals on August 3rd.	0 2 6	0 19 6	Fined 2*s.* 6*d.* in one case, and costs in both.
" 20	Crompton Spinning Co., Limited, cotton spinners, Shaw.	Lieut.-Col. Lees and J. W. Clegg, Esq., Police Court, Royton.	Employing seven young persons, one child, and two women before 6 a.m. on September 7th.	2 10 0	6 0 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Rochdale District*—cont.	£ s. d.	£ s. d.	
Sept. 28	Tottington and Woolfold Manufacturing Co., cotton manufacturers, near Bury.	A. C. Bealey and Henry Heys, Esqs., Police Court, Bury.	Employing six females during a mealtime on September 9th.	0 10 0	3 12 0	This case was adjourned from the 21st instant, the firm summoning the six females as the real offenders. The Bench, however, were not satisfied that "due diligence" had been used on the part of the firm and inflicted a fine of 10s. in one case and costs in all.
Oct. 4	Littleborough Dyeing Co., near Rochdale.	J. S. Littlewood and A. Law, Esqs., Town Hall, Rochdale.	Employing five young persons during a mealtime on September 21st.	0 12 6	1 7 6	
"	" "	" "	Employing two young persons for more than seven days without certificates of fitness on September 22nd.	0 5 0	0 11 0	
" 11	Richard Hulme, operative spinner at Bagley and Wright's Industry Mill, Oldham.	Robert Mellor and John T. Clegg, Esqs., Police Court, Royton.	Employing one young person during a mealtime on September 30th.	0 5 0	0 12 0	
"	Norman Mill Co., Limited, cotton spinners, Oldham.	" "	Employing three young persons during a mealtime on September 30th.	1 2 6	1 16 0	
" 18	A. L. Milne, brick manufacturer, Oldham	J. E. Schofield and Thomas Taylor, Esqs., Police Court, Oldham.	Employing two young persons without certificates of fitness.	0 10 0	0 16 0	
" 20	Sunnybrook Spinning Co., Limited, cotton spinners, Bridge Street, Rochdale.	C. Whittaker, Esq., and Dr. Malim, Rochdale Town Hall.	Employing three young persons during a mealtime on October 11th.	1 11 6	1 2 6	

Return of Prosecutions—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1893.			*In the Salford District.*	£ s. d.	£ s. d.	
Jan. 25	George Bonham & Co., Limited, cotton belting manufacturers, Pendleton Mills, Pendleton.	J. Makinson, Esq., Stipendiary, Salford.	Employing two women after 6 p.m. - -	0 10 0	0 8 0	
Mar. 10	Treliving and Hudson, finishers, Arlington Mills, Salford.	" "	Employing five women from 6 a.m. on February 10th until 9 a.m. on February 11th.	5 0 0	1 17 6	The Stipendiary thought it a very bad case, and said he would have inflicted a heavier fine if principals did not appear to have been ignorant of the act of their manager.
April 19	J. & R. Sinkinson, cotton spinners, King Street, Oldham.	E. Schofield and T. Taylor, Esqs., Town Hall, Oldham.	Being the occupiers of a factory where three young persons were employed during part of a time allowed for meals.	15 0	1 16 6	
" 20	Townley Mill Co., Limited, cotton spinners, Middleton.	Dr. Kershaw, Dr. Graham, and R. Booth, Esq., County Police Court, Middleton.	Being the occupiers of a factory where four young persons were employed during part of a time allowed for meals.	0 10 0	1 16 0	
May 1	Richard Aldcroft, engineer, Patricroft.	J. Leresche, Esq., Stipendiary, Eccles Police Court.	Failing to affix and to keep affixed the prescribed Abstract.	0 10 0	0 11 6	
" 5	Matthew Mosley, operative spinner, 179, Worsley Road, Little Hulton.	W. W. Cooke and G. Stuttard, Esqs., Worsley Police Court.	Allowing a young person to work between the fixed and traversing parts of a self-acting machine whilst the machine was in motion by the action of steam.	0 10 0	0 15 0	
June 7	Quick Edge Spinning Co., Limited, Grotton, near Oldham.	— Bent, — Mallalieu, — Shaw, and — Byrom, Esqs., Upper Mill.	Allowing eighteen women and young persons to remain in a room in which a manufacturing process was then being carried on during part of a meal time, viz.: 12.34½ p.m., on April 28th.	0 9 0	12 9 0	Defendant pleaded guilty. The Bench thought a fine of 6*d.* in each case sufficient. Afterwards I was informed that one of the Magistrates on the Bench was a shareholder in the defendant company.

RETURN OF PROSECUTIONS—*continued*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Salford District*—cont.	£ s. d.	£ s. d.	
June 8	Walker and Hulton, silk weavers, Middleton.	H. Heywood and S. Lees, Esqs., Police Court, Middleton.	Failing to limewash their factory within 14 months of the date when last limewashed.	0 1 0	0 5 6	I asked for a nominal fine, as limewashing was now done, and the occupation a very clean one.
" 10	William Yarwood, blacksmith, Primrose Bank, Oldham.	— Wainwright, — Taylor, and — Ward, Esqs., Town Hall, Oldham.	(1.) Failing to keep affixed the prescribed Abstract.	0 5 0	0 8 0	
"	" "	" "	(2.) Failing to keep the prescribed Register of young persons.	0 5 0	0 8 0	
"	William Brookes, brickmaker, Chamber Hill, Oldham.	" "	(1.) Failing to keep affixed the prescribed Abstract.	0 5 0	0 8 0	
"	" "	" "	(2.) Failing to procure a certificate of fitness for a young person within seven days of first employment.	0 5 0	0 13 0	
" 12	Burgess, Ledward, & Co., cotton weavers, Linneyshaw, Walkden.	J. Leresche, Esq., Stipendiary, Worsley Police Court.	Employing two women during part of the time allowed for meals.	- -	0 16 0	As the firm had a good record and promised the Stipendiary to be very careful in future they were only fined in the costs. (No penalty.)
" 15	Wm. Shackleton, operative spinner, 51, Shaw Road, Royton.	— Waddington and — Dronsfield, Esqs., Town Hall, Oldham.	Employing a young person during part of a time allowed for meals in the factory, to wit, at 8.17 a.m.	0 5 0	0 14 0	
"	Wm. Crosdale, operative spinner, 62, CromptonStreet, Oldham.	" "	Employing a young person during part of a time allowed for meals in the factory, to wit, at 8.17 a.m.	0 5 0	0 14 0	
"	Walter Clegg, operative spinner, 139, Ward Street, Oldham.	" "	Employing a young person during part of a time allowed for meals in the factory, to wit, at 8.17 a.m.	0 5 0	0 14 0	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Salford District*—cont.	£ s. d.	£ s. d.	
June 21	Quick Edge Spinning Co., Limited, cotton spinners, Grotton, near Oldham.	Henry Mallilieu and Ed. Shaw, Esqs., Mechanics Institute, Upper Mill.	Employing a woman and a young person during part of a time allowed for meals in the factory, viz., at 12.45 p.m.	0 10 0	1 0	
July 11	Andrew Walsh, book-keeper, Green Hill, Prestwich.	J. H. Leresche, Esq., Stipendiary, County Police Court, Manchester.	Having made a false entry in the Factory register as to the date of first employment of a young person.	5 0 0	1 9 0	Special costs allowed.
" 12	Hugh Arthur Gorton, tailor, 83, Broad Street, Pendleton.	Alderman Robinson and Alderman Jenkins, Salford Police Court.	Having employed one woman and five young persons after 4 p.m., viz., until 4.45 p.m.	1 10 0	2 8 0	
"	Henry Bramble, tailor, Broad Street, Pendleton.	" "	Having employed two women and one young person after 4 p.m., viz., until 4.35 p.m.	0 15 0	1 4 0	
" 21	Eli Gothard, mineral water maker, East Phillip Street, Salford.	Aldermen Moss and Jenkins, Town Hall, Salford.	Employing two young persons after 6 p.m., viz., until 9.30 p.m.	0 10 0	0 16 0	
Sept. 27	Wm. Harrop, cotton doubler, Acorn Mills, Werneth, Oldham.	Abraham Crompton, John Cooper, and John Travis Clegg, Esqs., Police Court, Royton.	Employing two young persons more than seven days without certificates of fitness.	0 10 0	1 4 0	
" 28	John Bentley and Sons, cotton weaving, Wellington Mills, Radcliffe.	A. C. Bealey and Hy. Heys, Esqs., Police Court, Bury.	Employing a child without any school attendance certificate.	0 1 0	0 12 0	
" 30	West End Mills Co., Limited, cotton spinners, Oldham.	G. Wainwright and G. B. Taylor, Esqs., Police Court, Oldham.	Employing two females before 6 a.m., viz., 5.56 a.m. (1.) (2.)	0 5 0 Dismissed	0 15 0 0 9 6	Penalty only in one case, the second being dismissed; the woman stating she was not working.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Salford District*—cont.	£ s. d.	£ s. d.	
Oct. 25	Joseph Graham, minder (operative), at Lansdowne Spinning Co., Limited, Oldham.	J. W. Ratcliffe, Esq., and Captain Crompton, Royton Court.	11th September 1893, employing a young person during meal hour.	0 10 0	0 14 6	
"	United Spinning Co., Limited, cotton spinners, United Mills, Werneth, Oldham.	" "	30th September 1893, employing two young persons during breakfast half-hour.	2 0 0	1 14 0	
" 26	Neville Mills Co., Limited, cotton spinners, Neville Mills, Oldham.	John Wilde and John F. Andrews, Esqs., Oldham Court.	30th September 1893, employing two women before 6 a.m., viz., at 5.54 a.m.	1 0 0	1 6 0	
1892.			*In the Manchester District.*			
Nov. 2	The Tailor-made Mantle Co., mantle makers, 16, Pool Street, Manchester.	J. Croston, Esq. (Chairman), and Alderman Crosfield, City Police Court, Minshull Street, Manchester.	Failing to send notice to H.M. Inspector of having commenced to occupy a workshop.	0 2 6	0 11 6	
"	Hagan and Woollam, Tailors, 17, Cross Street, Manchester.	" "	Failing to send notice to H.M. Inspector of having commenced to occupy a workshop.	0 2 6	0 11 6	
"	Lazarus Newmarsh, tailor, 62, Empire Buildings, MoretonStreet,Strangeways, Manchester.	" "	Failing to send notice to H.M. Inspector of having commenced to occupy a workshop.	0 2 6	0 13 6	
"	Isaac Goldberg, tailor, 5, Empire Buildings, Moreton Street, Strangeways, Manchester.	" "	Failing to send notice to H.M. Inspector of having commenced to occupy a workshop.	0 2 6	0 13 6	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
Nov. 2	Waddington and Donaldson, umbrella makers, 70, Tib Street, Manchester.	J. Croston, Esq. (Chairman), and Alderman Crosfield, City Police Court, Minshull Street, Manchester.	Failing to send notice to H.M. Inspector of having commenced to occupy a workshop.	0 2 6	0 11 6	
„	Manchester Umbrella Co., umbrella makers, 82, Tib Street, Manchester.	„ „	Failing to send notice to H.M. Inspector of having commenced to occupy a workshop.	0 2 6	0 11 6	
„	Ezra Hatton, ventilator maker, 110, Sackville Street, Manchester.	„ „	Employing a young person after 6 p.m. - -	0 5 0	0 12 6	
„ 4	William Hodgkinson, dress-maker, Bridge Street, Warrington.	Alderman J. Harrison (Chairman), and Dr. Gornall, Police Court, Warrington.	Employing a woman and a young person after 4 p.m. on Saturday, October 1st.	2 0 0	1 5 0	
„ 25	Jacob Libstein, slipper manufacturer, Long Mill Gate, Manchester.	— Henraques (Chairman), and James Parlane, Esqs., City Police Court, Minshull Street, Manchester.	Employing a Christian young person on Sunday.	0 5 0	0 11 6	
„	Samuel Dawson & Co., Limited, bleachers, Factory Lane, Harpurhey.	„ „	Employing a young person after 6 p.m. on 2nd September 1892.	0 5 0	0 11 6	
„	James Hancock and Son, packing-case makers, Great Bridgwater Street, Manchester.	„ „	Employing a young person for more than seven week days without a certificate of fitness.	0 5 0	0 11 6	
„ 25	Henry Whitmore, shirt maker, 206A, Clowes Street, West Gorton, near Manchester.	„ „	Failing to report to H.M. Inspector overtime worked by two women on September 13th and 14th.	- -	- -	Adjourned for one month. Medical certificate produced to prove defendant was lying seriously ill.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
Nov. 25	R. Peel & Co., finishers, Lower Cambridge Street, Manchester.	— Henraques (Chairman), and James Parlane, Esqs., City Police Court, Minshull Street, Manchester.	Employing a young person for more than seven work days without having obtained for him a certificate of his fitness from the certifying surgeon of the district.	1 0 0	0 12 6	
"	" "	" "	Failing to report to H.M. Inspector overtime worked by one woman and two young persons on September 7th.	0 10 6	0 11 6	
"	"	" "	Failing to affix, and keep affixed, in their factory a record of the employment of same woman and young persons on same date.	0 10 6	0 11 6	
"	Henry Hunt, tin-plate worker, Gorton Lane, Openshaw, near Manchester.	" "	Employing a young person for more than seven work days without having obtained for him a certificate of his fitness from the certifying surgeon of the district.	0 5 0	0 11 6	
Dec. 5	John Balshaw, printer, Station Road, Altrincham.	H. Joynson (Chairman), — Buckley, — Allen, — Platt, — Higgins, and —Gill, Esqs., Police Court, Dunham Road, Altrincham.	Employing two young persons for more than seven work days without certificates of fitness.	0 10 0	- -	Defendant pleaded guilty, and said that he had not employed young persons for some considerable time, and quite forgot requirements of the Act. The Magistrates were of opinion that a fine of 5*s.* in each case, to include costs, would meet the justice of the case. Defendant promised to conform with Act in future.
"	" "	" "	Failing to keep registers of the young persons employed by him in his factory.	0 5 0	- -	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
Dec. 6	Richard Bradshaw Leather, baker, Witton Street, Northwich.	C. Key (Chairman),—McRae, H. Newman, and F. Hurst, Esqs., Police Court, Northwich.	Omitting to hang up Abstract of the Factory Act.	0 7 0	0 13 0	Fine 1*l.*, to include costs.
"	Jabez Thompson, brick maker, Tive's Hill, Northwich.	" "	Failing to send notice to H.M. Inspector of having commenced to occupy a workshop.	0 1 0	0 8 6	Fine 1*s.* and costs.
"	John Woodcock, Saw mill occupier, Navigation Road, Northwich.	" "	Employing a young person for more than seven work days without having obtained for him a certificate of his fitness from the certifying surgeon of the district.	0 11 6	0 8 6	Fine 1*l.*, including costs.
" 23	Moses Franks, cap maker, 12, Robert Street, Manchester.	Francis Headlam, Esq., Stipendiary, City Court, Minshull Street, Manchester.	Having on Sunday the 18th September 1892 employed two women in his workshop, the said workshop having been opened for the employment of women on Saturday the 17th September.	4 10 0	1 19 6	
"	Davies Tragen, dressmaker, 5, Clarence Street, Cheetham, Manchester.	" "	Employing two women after 10 p.m. on 4th October 1892.	2 0 0	1 5 0	
"	J. H. Taylor, printer, 159, Rochdale Road, Manchester.	" "	Employing a young person more than seven work days without obtaining for him a certificate of fitness from the certifying surgeon of the district.	0 10 0	0 11 6	
"	Henry Whitmore, shirt maker, 206A, Clowes Street, West Gorton, Manchester.	" "	Failing to report to H.M. Inspector overtime worked by two women on the 13th and 14th September 1892.	1 0 0	1 3 0	
"	Bertinshaw and Turner, pickle makers, Viaduct Street, Beswick, Manchester.	" "	Employing a young person without having the prescribed particulars entered in the prescribed register.	0 10 0	0 12 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
Dec. 22	I. C. Yorke, mat maker, 5, Commercial Street, Manchester.	Francis Headlam, Esq., Stipendiary, City Court, Minshull Street, Manchester.	Employing a young person more than seven work days without having obtained for him a certificate of fitness from the certifying surgeon of the district.	1 0 0	0 12 6	
"	The Irkdale Printing Co., Smedley Road, Manchester.	" "	Employing four young persons without sufficient times for meals.	4 0 0	2 10 0	
1893.						
Jan. 18	Robert Dobson, packer, 42, Bloom Street, Manchester.	" "	Failing to procure certificate of fitness within the legal period for a young person employed by him.	0 10 0	0 11 6	
"	John Hargreaves, paper maker, Queen's Road, Manchester.	" "	Failing to procure certificate of fitness within the legal period for a young person employed by him.	0 10 0	0 11 6	
"	Oriental Curtain Co., bed drapery makers, 12, Faulkner Street, Manchester.	" "	Failing to affix the prescribed Abstract -	1 0 0	0 11 6	
"	Dorothy Taylor, apron maker, 58, Cannon Street, Manchester.	" "	Failing to serve notice of having begun to occupy a workshop.	- -	0 6 0	Owing to the poverty of the defendant no fine was inflicted, and a portion of the costs were remitted.
" 20	Nathan Wilkes, waterproof maker. Long Millgate, Manchester.	Alderman Lloyd and Ralph Hall, Esq., City Police Court, Manchester.	Employing two young persons after 7 p.m., to wit, at 10.20 p.m.	2 0 0	1 3 0	
"	Balfe & Co., cotton doublers, West Gorton, Manchester.	" "	Employing three women during part of a meal-time.	0 15 0	2 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Manchester District—cont.	£ s. d.	£ s. d.	
1893.						
Jan. 20	Jas. Bridge and Co., glass workers, Bromley Street, Manchester.	Alderman Lloyd and Ralph Hall, Esq., City Police Court, Manchester.	Failing to affix prescribed Abstract	0 5 0	0 11 6	
"	Cundiff and Pointer, glass workers, Mawson Street, Manchester.	"	Failing to send notice of new workshop	- -	0 6 0	Magistrate thought a nominal fine in costs would meet justice of the case.
"	Thomas Brown, pattern card finisher, 52, George Street, Manchester.	" "	Failing to affix prescribed Abstract	- -	0 6 0	Magistrate thought a nominal fine in costs would meet justice of the case.
" 24	Alfred Lloyd Hulme, india-rubber manufacturer, Gorton, near Manchester.	J. H. P. Leresche, Esq., Stipendiary, County Police Court, Manchester.	Failing to affix prescribed Abstract	1 0 0	0 13 6	
" 25	Robert Cowen, glass maker, Cotton Street, Allum Street, Manchester.	Wm. Wilson and Jas. Hy. Wills, Esqs., City Police Court, Manchester.	Failing to affix the prescribed Abstract	0 5 0	0 11 6	
"	A. F. Ross, slipper maker, Edge Street, Manchester.	" "	Failing to affix the prescribed Abstract	0 5 0	0 11 6	
"	Douglas & Co., slipper makers, Lees Street, Manchester.	" "	Failing to procure certificate of fitness for a young person.	0 5 0	0 11 6	
"	J. Smith and Son, timber dealers, Ducie Street, Manchester.	" "	Failing to procure certificate of fitness for a young person.	0 5 0	0 11 6	
Feb. 8	Samuel Rosenthal, cap maker, Miller Street, Manchester.	H. Bannerman, and H. Lloyd, Esqs., City Police Court, Manchester.	Failing to produce a certificate of attendance at school for a child employed by him.	1 0 0	0 11 6	
"	Sydney Drew, chair maker, Queen Street, Hulme.	" "	Failing to affix the prescribed Abstract	0 10 6	0 11 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
Feb. 8	J. F. Harrison & Co., apron makers, 36, Port Street, Manchester.	H. Bannerman, and H. Lloyd, Esqs., City Police Court, Manchester.	Failing to report to the Inspector having begun to occupy a workshop.	- -	- -	Defendants twice (once on adjournment) failed to appear, and seemed to have left, leaving no address. I did not pay costs.
„ 15	Murray & Co., Limited, cotton spinners, Murray Street, Manchester.	F. Headlam, Esq., Stipendiary, City Police Court, Manchester.	Allowing a child to work between the fixed and traversing parts of a self-acting machine whilst in motion by steam.	- -	0 10 6	Injured child at trial swore that he went into machine voluntarily, this was the reverse of his statements to me at time of the discovery of the offence. Case dismissed; costs paid by me.
„ 22	Michael Silverstone, hooker, 20, Oxford Street, Manchester.	John Clapham and John H. Clarke, Esqs., City Police Court, Manchester.	Employing two young persons more than seven work days without certificate of fitness.	0 10 0	1 3 0	
„	Wild & Co., shroud makers, 41, Dale Street, Manchester.	„ „	Failing to affix the prescribed Abstract -	0 5 0	0 11 6	
Mar. 3	Thos. Davenport & Co., packers, 4, Minshull Street, Manchester.	Jas. Croston and E. Elliott, Esqs., City Police Court, Manchester.	Employing two young persons after 7 p.m. without reporting it to the Inspector on the 1st, 2nd, and 3rd February 1893.	} 0 10 0	4 12 6	Fined 10*s*. in one case and costs in the other nine.
„	„ „	„ „	Employing two young persons on the 1st and 2nd of February 1893, without sufficient times for meals.			
„ 17	Lewis Schlamberg, cap maker, Exchange Street, Manchester.	F. Headlam, Esq., Stipendiary, City Police Court, Manchester.	Employing a young person after 4 p.m. on Sunday, 12th February 1893.	0 10 0	0 11 6	
„ 24	Samuel Butterworth, pattern card maker, York Street, Manchester.	„ „	Employing six young person after 8 p.m. on 3rd of February, without reporting it to an Inspector.	3 0 0	3 9 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
Mar. 24	Joseph F. Hague, foreman pattern card maker, 195, Conran Street, Harpurhey, Manchester.	F. Headlam, Esq., Stipendiary City Police Court, Manchester.	Obstructing the Inspector whilst in the execution of his duties, 3rd February.	0 10 0	1 14 6	Two informations. Defendant was foreman for Butterworth. At my visit on December 3rd, he concealed these young persons from me by putting them down the hoist whilst I was kept outside. Fined 5*s.* in each case, and costs of three witnesses.
"	Samuel Butterworth, pattern card maker, 195, Conran Street, Harpurhey, Manchester.	" "	Being the occupier of a workshop where an inspector was obstructed in the execution of his duties, 3rd February.	1 0 0	0 8 6	No witness summoned.
" 29	Cooper Bros., glass bevellers, Green Lane, Manchester.	" "	Employing three young persons after 6 p.m., to wit, until 8.50 p.m., 3rd March 1893.	1 11 6	1 14 6	
April 14	Burgon & Co., grocers, Ackers Street, Oxford Road, Manchester.	John Lomax, Esq., and Alderman A. E. Lloyd, City Police Court, Manchester.	Employing five young persons more than seven days without a certifiate of fitness from the certifying surgeon.	1 0 0	2 5 6	
"	The Manchester Printing Ink Co., printing ink manufacturers, 18A, New York Street, Oxford Street, Manchester.	" "	Failing to affix the Abstract of the Act	0 10 0	0 11 6	
"	" "	" "	Employing two young persons more than seven days without certificates of fitness from the certifying surgeon.	0 10 0	1 0 0	
"	Thos. Carlisle & Co., printer, Swan Street, Manchester.	" "	Employing four young persons more than seven work days without procuring for them certificates of fitness.	1 0 0	1 17 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
[illegible]			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
April 14	F. H. Royce & Co., electricians, Cooke Street, Stratford Road, Hulme, Manchester.	John Lomax, Esq., and Alderman A. E. Lloyd, City Police Court, Manchester.	Employing three young persons after 6 p.m. on 9th March.	1 0 0	1 8 6	
" 21	Chas. Henry Cooper, letterpress printer, 69, Moseley Street, Manchester.	F. J. Headlam, Esq., City Police Court.	Neglecting to limewash the factory within the time prescribed by the Act.	1 0 0	0 11 6	
"	B. Wadsworth, bookbinder, 27, Corporation Street, Manchester.	" "	Neglecting to limewash the factory within the time prescribed by the Act.	1 0 0	0 11 6	
"	J. Brownhill & Co., letterpress printers, 66 and 68, Thomas Street, Manchester.	" "	Failing to keep register of young persons in prescribed form.	1 0 0	0 11 6	
"	" "	" "	Employing a young person more than seven days without a certificate of fitness from the certifying surgeon.	1 0 0	0 11 6	
"	" "	" "	Neglecting to fence the fly-wheel of their gas engine.	2 0 0	0 11 6	
May 19	Heighway and Son, saw mill occupiers, Bk. Water Street, Manchester.	J. Snape (Chairman), and — Sherratt, Esqs., City Police Court, Minshull Street, Manchester.	Employing two young persons for more than seven work days without certificates of fitness.	1 0 0	1 6 0	
"	John Townsend, wheelwright, Granty Row, Manchester.	" "	Employing two young persons after 6 p.m. on April 20th.	1 0 0	1 1 0	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
June 16	A. Ellison, fustian cutter, Booth's Hill, Lymm.	W. Long (Chairman), Charles Lisker, Esqs., and Dr. Brabazon, Police Court, Lymm.	Employing two women before 7 a.m. on 12th May 1893.	- -	0 16 0	The women, in evidence, stated they came to work before legal hours unknown to occupier; and the Magistrates thought payment of costs a sufficient penalty.
"	E. Thorneycroft, fustian cutter, Rookey, Lymm.	" "	Employing a woman before 7 a.m. on 12th May 1893.	- -	0 8 0	Woman stated she came to work unknown to occupier; and the Magistrates thought payment of costs a sufficient penalty.
"	The New Cutting Co., fustian cutters, Cherry Lane, Lymm.	" "	Employing a woman and a young person before 7 a.m. on 12th May 1893.	- -	0 17 0	Manager pleaded "guilty," and promised to comply with law in future. Magistrates thought payment of costs sufficient penalty. Extra cost for service of witnesses summoned.
"	Richard Daniels, fustian cutters, Newfield, Lymm.	" "	Employing a woman before 7 a.m. on 12th May 1893.	0 5 0	0 12 0	Defendant pleaded guilty, and I pressed for a penalty, the defendant being in the factory at the time of my visit and saw woman at work. The Magistrates were of opinion that a small penalty would meet the justice of the case, these being the first cases of the kind heard at that Court; but should any similar cases be brought before them they would be more severely dealt with.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
June 23	Parkinson & Co., tanners, Latchford, near Warrington.	Alderman Harrison (Chairman), Dr. Gornal, H. Roberts, and J. Weight, Esqs., Police Court, Warrington.	Employing a young person for more than seven work days without a certificate of fitness.	0 5 0	0 12 6	
"	" "	" "	Employing the same young person without keeping the prescribed register.	0 5 0	0 8 0	
" 27	Pierpoint and Briant, Hair and Size Works, Latchford, Warrington.	W. Long (Chairman), H. Nield, and W. Talbot, Esqs., Police Court, Daresbury.	Employing a young person for more than seven work days, viz., eight months, without a certificate of fitness.	- -	0 11 3	Conviction in costs only. Defendant's manager appeared and pleaded "guilty." I pressed for a penalty, the firm well knowing the requirements of the Act. The Magistrates after consultation stated that this being the first case of the kind heard at that Court, they were of opinion that conviction in costs would meet the justice of the case.
" 28	William Turtle, musical instrument maker, 238, Temperance Street, Ardwick, Manchester.	Col. Clarke (Chairman), Charles Griffin, and — Charlton, Esqs., City Police Court, Minshull Street, Manchester.	Not affixing Abstract of Act - - -	0 2 6	0 11 6	
"	Abraham Frendt, tailor, 97, Great Ducie Street, Strangeways, Manchester.	" "	Employing two women after 8 p.m., viz., till 10.38 p.m.	1 0 0	1 3 0	10*s.* and costs in each case.
"	The Horrock's Lane Dyeing and Finishing Co., Red Bank, Manchester.	" "	Employing a young person for more than seven work days without surgical certificate.	1 0 0	0 11 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
June 28	The Horrock's Lane Dyeing and Finishing Co., Red Bank, Manchester.	Col. Clarke (Chairman), Charles Griffin, and — Charlton, Esqs., City Police Court, Minshull Street, Manchester.	Employing a young person without allowing him sufficient time for meals.	1 0 0	0 11 6	
"	Herwald Bros., tailors, 72, Hanover Street, Manchester.	" "	Failing to send notice to H.M. Inspector of having commenced to occupy a workshop.	0 1 0	0 11 6	
July 3	Lambert and Son, brickmakers, Bowden, near Altrincham.	R. H. Joynson (Chairman), A. W. Mills, and Hugh Cawley, Esqs., Altrincham.	Employing three young persons for more than 13 work days without certificates of fitness.	0 15 0	2 0 0	5*s.* and costs in each case.
"	" "	" "	Failing to exhibit Abstract	0 5 0	0 13 0	
" 14	W. and D. Moffitt, dressmakers, 77, Bury New Road, Manchester.	F. Headlam, Esq., Stipendiary, City Police Court, Minshull Street, Manchester.	Employing three women after the hour of 4 p.m. on Saturday.	3 0 0	1 4 6	1*l.* and 11*s.* 6*d.* costs in each case.
"	" "	" "	Employing a woman overtime without keeping the required record and sending notice to the Inspector before 8 p.m. the same night.	1 0 0	0 11 6	
"	Henry Smithies, cigarette manufacturer, 132, London Road, Manchester.	" "	Failing to send notice to H.M. Inspector of having commenced to occupy a factory opened in March.	0 5 0	0 11 6	

Return of Prosecutions—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1893.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
July 19	George Paton, aërated water manufacturer, 33, Lucy Street, Stretford Road, Manchester.	F. Headlam, Esq., Stipendiary, City Police Court, Manchester.	Neglecting to fence two fly wheels of a gas engine.	2 0 0	0 11 6	
"	William Whitehead, manager to Messrs. Clemson & Co., dyers, Red Bank, Manchester.	" "	Employing three young persons after 6 p.m., viz., till 7 p.m.	1 0 0	1 7 6	20*s.* and costs in one case. Costs only in the others.
" 20	Thomas Hilton, Great Western Street, Moss Side, Manchester.	J. H. Leresche, Esq., Stipendiary, Police Court, Strangeways, Manchester.	Neglecting to fence a horizontal shaft -	1 0 0	0 11 6	
" 21	Maria Henry, dressmaker, 145, Rochdale Road, Manchester.	F. Headlam, Esq., Stipendiary, City Police Court, Manchester.	Neglecting to send notice of opening a workshop.	- - -	0 8 6	Conviction in costs only. Adjourned from 14th instant, the defendant being too ill to appear.
"	Joseph Rogan, Parker Street Mill, Newtown, Manchester.	" "	Neglecting to fence mill gearing, viz., a horizontal shaft.	1 0 0	0 11 6	Adjourned from the 19th instant, in consequence of defendant being represented by his manager, also that the officer who served summons on defendant was away ill.
Aug. 9	C. E. Austin and Bro., cleaning waste manufacturers, Ardwick, Manchester.	F. J. Headlam, Esq., Stipendiary, City Police Court, Manchester.	Neglecting to fence a shaft being mill gearing, in consequence of which neglect a woman was killed, 8th July 1893.	10 0 0	0 11 6	As the woman was disobeying orders at the time of the accident, the magistrate decided to inflict a small penalty, half of which he recommended should be allotted to the mother of the deceased, which recommendation was given effect to by the Secretary of State.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
Aug. 18	Woolf and Higham, small ware manufacturers, Ellesmere Street, Hulme, Manchester.	F. Headlam, Esq., Stipendiary, City Police Court, Minshull Street, Manchester.	Employing a child as a young person -	1 0 0	0 12 6	
"	" "	" "	Employing same child without a certificate of fitness.	1 0 0	0 11 6	
"	" "	" "	Not keeping register of children - -	- -	0 8 6	Conviction in costs only.
"	Albert Roylance, confectioner, 102, Ashton New Road, Beswick, Manchester.	" "	Employing a woman after 8 p.m., viz., till 10 p.m., on July 7th.	1 0 0	0 11 6	
"	Hugo Shaw, pottery manufacturer, Philips Park Road, Beswick, Manchester.	" "	Employing two young persons without certificates of fitness.	2 0 0	1 3 0	
"	" "	" "	Failing to keep register of young persons employed.	- -	- -	Withdrawn. Magistrate thought penalties in the two first cases would meet the justice of the case.
"	Doniger & Co., cap manufacturers, 45, Carnarvon Street, Cheetham, Manchester.	" "	Employing four young persons for more than seven work days without certificates of fitness.	3 0 0	2 3 0	
Sept. 22	Delaney & Co., packers, 44, Princess Street, Manchester.	William Sherratt (Chairman), and Charles Griffin, Esqs., City Police Court, Manchester.	Employing two women on August 21st and 22nd, after the hour of 8 p.m., viz., till 9 p.m.	1 0 0	2 6 0	5s. and costs in each case.
"	" "	" "	Failing to make an entry and report to H.M. Inspector, overtime worked by the same women on August 21st and 22nd.	0 10 0	0 11 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Manchester District*—cont.	£ s. d.	£ s. d.	
Sept. 22	Miss Hillis, 121, Grosvenor Street, All Saints, Manchester.	William Sherratt (Chairman), and Charles Griffin, Esqs., City Police Court, Manchester.	Employing a woman after the hour of 4 p.m. on Saturday.	0 10 0	0 11 6	
Oct. 20	E. Brown and Sons, bakers, The Cross, Lymm.	E. P. Norris, Esq. (Chairman), and Dr. Brabazon, Police Court, Lymm.	Employing a young person at night on August 25th.	1 0 0	0 14 6	
"	" "	" "	Neglecting to affix Abstract - - -	- -	0 3 6	Withdrawn.
" 23	Cross and Bell, saw mill occupiers, Timperley.	R. N. Joynson (Chairman), and A. W. Mills, Esqs., Police Court, Altrincham.	Neglecting to fence fly wheel of a gas engine.	1 0 0	0 8 6	
1892.			*In the Bolton District.*			
Nov. 17	T. Morris and Sons, iron founders, Farnworth.	J. B. Ashworth and E. Pilkington, Esqs., County Police Court, Bolton.	Employing a young person without a certificate of fitness.	1 0 0	0 12 6	
" 21	Joseph Ballard, rope maker, Miry Lane, Wigan.	W. M. Roocroft and M. Benson, Esqs., Wigan.	Employing a child otherwise than in morning and afternoon sets or on alternate days.	1 0 0	0 12 6	
"	" "	" "	Employing a young person for more than seven working days without a certificate of fitness.	0 10 0	0 12 6	
Dec. 5	Caleb Wright & Co., Limited, cotton spinners, Tyldesley.	F. W. Bouth, T. E. Withington, J. E. J. Ferguson, and O. P. Lancashire, Esqs., Leigh, Lancashire.	Employing four women and two young persons during illegal hours.	3 0 0	5 14 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Bolton District*—cont.	£ s. d.	£ s. d.	
Dec. 29	H. and E. Deakin, bleachers, Belmont, near Bolton.	Walton Ainsworth and B. A. Dobson Esqs., County Police Court, Bolton.	Employing three women and two young persons during illegal hours, to wit, at 7 p.m., the said women and young persons having begun work at 6 a.m. on the same day.	5 0 0	2 10 0	Five cases, the Magistrates inflicted a penalty of 20s. and costs in each case.
1893.						
Mar. 6	Joseph Heath, self-acting mule minder, 43, Beckett Street, Bolton.	W. Nicholson, Alfred Hackney, and G. H. Crook, Esqs., Borough Police Court, Bolton.	Allowing a child to clean a machine in a factory while the same was in a motion.	0 2 6	0 19 0	This was the first case taken in this Borough against the employes without first proceeding against the occupier of the factory.
"	S. and J. Prestwich, cotton manufacturers, Pandora Mills, Farnworth.	Walton Ainsworth and Thomas Glaister, Esqs., County Police Court, Bolton.	Employing four young persons during illegal hours.	1 0 0	2 9 6	
April 13	The Bolton Union Spinning Co., cotton spinners, Bolton.	J. P. Haslam and H. T. Deakin, Esqs., County Police Court, Bolton.	Neglecting to limewash inside walls and ceilings of factory within 14 months.	0 10 0	0 10 0	
"	" "	" "	Allowing a child to clean machinery whilst in motion.	0 10 0	0 10 0	
"	Joseph Lee, boxmaker Bradshaw, near Bolton.	" "	Employing a young person under the age of 16 years, without having obtained a certificate of fitness from the certifying surgeon.	1 0 0	0 14 6	
"	James Horrocks, self-acting mule minder, Westhoughton.	" "	Employing a child during a time allowed for meals.	0 10 0	0 16 0	
"	Patrick Connolly, self-acting mule minder, Westhoughton.	" "	Employing a young person during a time allowed for meals.	0 10 0	0 17 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bolton District*—cont.	£ s. d.	£ s. d.	
April 28	Alfred Bywater, joiner, Pemberton, near Wigan.	Thomas Marshall and N. F. Eckersley, Esqs., County Police Court, Wigan.	Failing to obtain certificate of fitness for young person.	0 2 6	0 14 6	It being the first offence I only asked for small penalty.
"	Ormrod and Gee, brickmakers, Orrell, near Wigan.	" "	Failing to obtain certificate of fitness for young person.	0 10 0	0 14 6	
May 29	Miss M. A. Doyle, dressmaker, 37, Lord Street, Southport.	W. Hulme and J. Austerfield, Esqs., Borough Police Court, Southport.	Employing a woman and a young person during illegal hours.	0 5 0	0 14 0	These being my first cases in Southport, I asked the Bench to inflict a small penalty, the defendants having pleaded guilty.
"	Mrs. E. Wood, dressmaker, 37, Riding Street, Southport.	" "	Employing a woman during illegal hours.	0 5 0	0 7 0	
June 12	Mrs. Jane Smith, milliner, 54, Clarence Chambers, Wigan.	Dr. Roocroft and M. Benson, Esq., Borough Police Court, Wigan.	Employing four women during illegal hours.	0 10 0	2 10 0	
"	" "	" "	Failing to affix the prescribed Abstract in the Workshop.	0 2 6	0 12 6	
July 3	W. J. Pierce, dressmaker, Chapel Street, Southport.	W. Hulme and E. J. Rimmer, Esqs., Borough Police Court, Southport.	Employing two women and two young persons during illegal hours, to wit, at 8.35 p.m	0 10 0	0 13 6	Mr. Pierce promising that he would not offend again, I asked the Magistrates for a small penalty.
Aug. 14	Ainsworth Vale Co., bleachers, Ainsworth, near Bolton.	O. O. Wrigley and A. C. Bealey, Esqs., County Police Court, Bury.	Employing a young person during illegal hours, to wit, at 10 p.m.	0 10 0	0 15 6	This being the firm's first offence I asked the Magistrates to inflict a small penalty.
" 24	T. H. & T. Monks, tripe dressers, Church Bank, Bolton.	William Nicholson (Mayor,) and James Sherry, Esqs., Borough Police Court, Bolton.	Employing three children during illegal hours, to wit, at 11 a.m. on Sunday.	0 7 6	2 2 3	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bolton District*—cont.	£ s. d.	£ s. d.	
Aug. 24	Ellis Lee, wringing machine maker, 135, Bridgman Street, Bolton.	William Nicholson (Mayor), and James Sherry, Esqs., Borough Police Court, Bolton.	Employing a young person without having obtained certificate of fitness from the certifying surgeon for the district. The said young person having worked for Mr. Lee upwards of three months.	0 5 0	0 13 6	
„ 8	James Eckersley & Co., Limited, Swan Meadow Mill, Wigan.	Jonathan Phillips, Esq. (Mayor) Dr. Roocroft and M. Benson, Esq., Borough Police Court, Wigan.	Employing four women during a time allowed for meals, to wit, 12.45 p.m. The time for dinner as per abstract, 12.30 p.m. to 1.30 p.m.	0 5 0	1 13 6	
Sept. 21	J. Mook & Co., mineral water manufacturers, 64, Chatham Road, Birkdale.	Dr. G. B. Barron and John Formby, Esq., County Police Court, Birkdale.	Employing a child otherwise than on the system of employment in morning and afternoon sets or on the system of alternate days only.	0 5 0	0 11 0	
„	„ „	„ „	Employing a male child without having registered the name and other particulars as required by Section 77.	0 5 0	0 11 0	
1892.			*In the Liverpool District.*			
Dec. 7	Elizabeth Hayward, dressmaker, 166, North Hill Street, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Employing three women at 6.25 p.m. on Saturday, November 19th.	0 15 0	0 17 6	
1893.	„ „	„ „	Neglecting to affix abstract.	0 1 0	0 1 0	
Jan. 4	Madame Val Smith, milliner, Church Street, Liverpool.	„ „	Employing four women at 4.45 p.m. on Saturday, November 26th.	1 5 0	1 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
Jan. 4	Bernard McPoland, cotton kiln, 9, Naylor Street, Liverpool.	Wm. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Neglecting to keep Abstract of Act posted at his cotton kiln.	0 10 0	0 4 6	
„ 20	The Clog, Sole, and Wood Fibre Co., Bedford Place, Bootle.	J. Wells, Esq., and Dr. Sprakeling, Bootle.	Employing six boys without certificates of fitness.	0 15 0	2 14 0	
Feb. 8	F. W. Mayor, joiner, &c., 87, Tithebarn Street, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Neglecting to keep affixed the prescribed Abstract.	0 10 0	0 4 6	An unregistered factory.
„	Devereux (W. D. Richardson) mantle maker, 64, Bold Street, Liverpool.	„ „	Neglecting to send notice of commencing to occupy.	0 10 0	0 4 6	
„	„ „	„ „	Neglecting to keep affixed the prescribed Abstract.	0 10 0	0 4 6	
„	James Gilmore, Saw Mill, Holme Street, Liverpool.	„ „	Neglecting to keep affixed the prescribed Abstract.	0 10 0	0 4 6	An unregistered factory.
„	Aaron Levy, tailor, 42, Pleasant Street, Liverpool.	„ „	Employing a woman after 4 p.m. on Saturday.	0 10 0	0 7 6	
„	Old Calabar Biscuit Co., Juniper Street, Liverpool.	„ „	Employing one young person unregistered	0 10 0	0 7 6	
„	„ „	„ „	Employing two young persons without certificates of fitness.	0 10 0	0 7 6	
„	Greenwood & Co., tin canister makers, 47, Bankhall Street, Liverpool.	„ „	Employing children unregistered	0 10 0	0 4 6	
„	„ „	„ „	Employing two children without certificates of fitness.	1 0 0	0 15 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
Feb. 8	A. Harrison, Limited, patent stopper makers, Brazenose Road, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Employing two young persons unregistered.	0 10 0	0 7 6	
	" "	" "	Employing same two young persons uncertified.	0 10 0	0 7 6	
"	Jacob Davies, tailor, 15, St. Vincent Street, Liverpool.	" "	Employing women at 5 p.m. on Saturday	- -	0 15 0	Two informations. Case was adjourned from February 1st to see if Mr. Davies complied as to changing the weekly half holiday.
" 15	Jas. Mawdsley and Son, printers and bookbinders, Castle Street, Liverpool.	" "	Employing nine women at 1 a.m. on January 25th.	4 10 0	2 6 6	
"	W. Cade & Co., aërated water works, Upper Parliament Street, Liverpool.	" "	(1.) Neglecting to keep Registers of young persons employed.	0 10 0	0 4 6	
"	"	" "	(2.) Neglecting to give notice of holidays in first week of January.	0 10 0	0 4 6	
"	Charles Sunderland, tailor, North John Street, Liverpool.	" "	Neglecting to keep list of outworkers in prescribed form.	0 10 0	0 4 6	
"	P. Smith and Son, tailors, North John Street, Liverpool.	" "	(1.) Neglecting to give notice of commencing to occupy.	0 10 0	0 4 6	
"	" "	" "	(2.) Neglecting to affix prescribed Abstract.	0 10 0	0 4 6	
"	James Doyle, tailor, Old Haymarket, Liverpool.	" "	(1.) Neglecting to keep list of outworkers in prescribed form.	0 10 0	0 4 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
Feb. 15	James Doyle, tailor, Old Haymarket, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	(2.) Neglecting to affix prescribed Abstract.	0 10 0	0 4 6	
„	J. Maguire, tailor, Roderick Street, Liverpool.	„ „	(1.) Neglecting to give notice of commencing to occupy.	0 10 0	0 4 6	
„	„ „	„ „	(2.) Neglecting to affix prescribed Abstract.	0 10 0	0 4 6	
„	Max Turmarkin, tailor, Gill Street, Liverpool.	„	(1.) Neglecting to give notice of commencing to occupy.	0 10 0	0 4 6	
„	„ „	„ „	(2.) Neglecting to affix prescribed Abstract.	0 10 0	0 4 6	
„ 22	R. Field (Robt. Goodson), mantle maker, 62A, Church Street, Liverpool.	„ „	Neglecting to give notice of commencing to occupy the workshop.	0 10 0	0 4 6	
„	„ „	„ „	Neglecting to affix Abstract of Act - - -	0 10 0	0 4 6	
„	Lewis Mendelsohn, tailor, 27, Pleasant Street, Liverpool.	„ „	Neglecting to affix Abstract - - - -	0 10 0	0 4 6	An unregistered workshop.
„	Wroe and Laxton, printers, Paradise Street, Liverpool.	„ „	Neglecting to give notice of commencing to occupy.	0 10 0	0 4 6	
„	„ „	„ „	Neglecting to affix Abstract - - - -	0 10 0	0 4 6	
„	Gibbs, Patton, & Co., sack makers, Irwell Street, Liverpool.	„ „	Neglecting to affix Abstract - - - -	0 10 0	0 4 6	
„	Walter Kenyon, sack maker, Irwell Place, Liverpool.	„ „	Neglecting to give notice of commencing to occupy.	0 10 0	0 4 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
Feb. 22	Walter Kenyon, sack maker, Irwell Place, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Neglecting to affix Abstract - - -	0 10 0	0 4 6	
Mar. 13	Elias Williams, dressmaker, Foregate Street, Chester.	James Salmon, Esq., The Mayor, and Dr. John Roberts, Town Hall, Chester.	Employing two young persons till 10.45 p.m. on January 24th.	1 0 0	1 3 0	Two informations.
"	" "	" "	Employing a woman till 3 a.m. on January 25th.	1 0 0	0 11 6	
" 15	The Liverpool Electro-plating Company, 14, Brook's Alley, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	Unregistered factories.
"	Main & Co., cigarette makers, 44, Hanover Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	J. P. Jackson & Co., brass-finishers, 63, Duke Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	Griffith and Davies, sail makers, 27, Water Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	Unregistered workshops.
"	Elizabeth Nevitt, shirt maker, 44, Hanover Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	R. C. Oldfield, jeweller, Old Post Office Place, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	M. McEachen, cork manufacturer, 49, Paradise Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
Mar. 15	Thomas Waterson, tailor, 8, Leander Street, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Neglecting to register his workroom by sending the prescribed notice of commencing to occupy.	0 2 6	- -	Small penalty with no costs, at my request, the defendant being in a small way of business.
"	Studd & Co., trunk manufacturers, 46, Hanover Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	An unregistered workshop. (refers to this row and the next)
"	Margaret Edwards, dressmaker, 28, Chapel Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	W. S. Higham, tailor, 30, Church Street, Liverpool.	" "	(1.) Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	" "	" "	(2.) Neglecting to keep prescribed list of outworkers.	0 10 0	0 4 6	
"	J. T. Beer, tailor, 36, Church Street, Liverpool.	" "	Neglecting to keep prescribed list of outworkers.	0 10 0	0 4 6	
"	McDonald and Richmond, mantles, 49, London Road, Liverpool.	" "	Employing a young person at 4.45 p.m. on the weekly half-holiday.	0 5 0	0 4 6	
" 17	Hugh Lewis, & Co., rope manufacturers, Mill Lane, Wavertree.	Arthur Earle and W. H. Pickford, Esqs., Wavertree Town Hall.	Employing a child without school certificates.	0 10 0	0 7 6	
"	" "	" "	Employing a child and a young person without surgical certificates.	0 10 0	0 7 6	
"	"	" "	Neglecting to affix notice of holidays in the factory and to send a copy of the same to the Inspector.	0 10 0	0 7 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
Mar. 17	H. Matson, saw mill, 17, Lance Lane, Wavertree.	Arthur Earle and W. H. Pickford, Esqs., Wavertree Town Hall.	Neglecting to affix prescribed Abstract of the Act.	0 10 0	0 7 6	An unregistered factory.
April 12	Hermann Kessler, tailor, 1, Brown Street, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Employing a girl on Sunday, the workroom having been opened on Saturday for work.	0 10 0	0 13 6	
"	Joseph Jacobson, tailor, 15, Edward Street, Liverpool.	" "	Failing to exhibit the prescribed Abstract -	0 10 0	0 4 6	
"	" "	" "	Employing a boy on Sunday, the workshop having been opened on Saturday for work.	- -	0 10 6	Dismissed. The boy stated that he only came to bring his father's meal, though seen working at the machine.
"	Thos. Henry, dressmaker, 7, Scotland Place, Liverpool.	" "	Employing two women after 8 p.m. on Saturday without recording overtime.	1 0 0	0 15 6	
"	J. and L. Lacy, corn millers, Parr Street, Liverpool.	" "	Employing two boys on Saturday after 2 p.m.	1 0 0	0 15 6	
"	George Leather, cotton picker, 6, Parr Street, Liverpool.	" "	Neglecting to affix prescribed Abstract -	0 10 0	0 4 6	
" 15	Geldart, & Co., soft soap manufacturers, Rathbone Road, Liverpool.	— Goodison and — Stone, Esqs., Islington Court House, Liverpool.	(1.) Neglecting to keep register of the young persons and children employed.	0 5 0	0 12 6	
"	" "	" "	(2.) Neglecting to obtain certificates of fitness for the same.	0 5 0	0 7 6	
"	" "	" "	(3.) Neglecting to obtain school certificates for the children employed.	0 5 0	0 7 6	
"	John Preston, fell-monger, Rathbone Road, Liverpool.	" "	(1.) Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 7 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
April 15	John Preston, fell-monger Ruthbone Road, Liverpool.	— Goodison and — Stone, Esqs., Islington Court House, Liverpool.	(2.) Neglecting to obtain certificate of fitness for a young person.	0 10 0	0 10 6	
" 17	Josiah Cook & Co., dress-makers, Church Street, St. Helens.	— Martin and — Glover, Esqs., St. Helens Town Hall.	Employing five women and young persons at 5 p.m. on the weekly half-holiday.	0 10 0	1 2 6	
"	John Rigby, wheelwright, North Road, St. Helens.	" "	Neglecting to affix prescribed Abstract	0 5 0	0 4 6	An unregistered factory.
"	The St. Helens Printing and Publishing Company, Hardshaw Street, St. Helens.	" "	(1.) Neglecting to affix prescribed Abstract	0 5 0	0 4 6	
"	" "	" "	(2.) Neglecting to keep the factory in conformity with Section 3, as to cleanliness and ventilation.	0 5 0	0 4 6	
	" "	" "	(3.) Neglecting to obtain certificates of fitness for a young person and a child.	-	0 4 6	Dismissed. The manager stated they were only errand boys. I put the boys into the witness box, and one stated that he had been setting type, and the other that he had been used to clean machinery, &c. In spite of Section 94, the Magistrates would not convict.
" 19	Bessie Edmonds, milliner, &c., 197-199, London Road, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Employing a girl after 4 p.m. on the weekly half-holiday.	1 0 0	0 4 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
April 19	C. Jones and Son, milliners, 61–63, Brunswick Road, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Employing a girl after 4 p.m. on the weekly half-holiday.	0 10 0	0 4 6	
May 17	Barnett Clumpus, tailor, 45, Warren Street, Liverpool.	,, ,,	Neglecting to give notice of commencing to occupy the workshop.	0 10 0	0 4 6	
,,	Dean and Lang, dressmakers, 4, Admiral Street, Liverpool.	,, ,,	(1.) Neglecting to give notice of commencing to occupy the workshop.	0 10 0	0 4 6	
,,	,, ,,	,, ,,	(2.) Employing two females after 4 p.m. on Saturday.	0 10 0	0 6 6	
,,	G. B. Kirkland, iron foundry, &c., Banastre Street, Liverpool.	,, ,,	(1.) Neglecting to send notice of commencing to occupy.	0 10 0	0 4 6	
,,	,, ,,	,, ,,	(2.) Neglecting to keep Abstract affixed -	0 5 0	0 4 6	
,,	,, ,,	,, ,,	(3.) Neglecting to fence engine - -	2 0 0	0 4 6	
,,	Blanche Moore, dressmaker, 2, Jolliffe Street, Liverpool.	,, ,,	Neglecting to affix prescribed Abstract - -	0 10 0	0 4 6	
,,	Jane Ashton, vest maker, 82, Aubrey Street, Liverpool.	,, ,,	Neglecting to affix prescribed Abstract -	0 10 0	0 4 6	
,,	Morris Nieman, tailor, 6, Upper Duke Street, Liverpool.	,, ,,	Neglecting to affix prescribed Abstract - -	0 10 0	0 4 6	
,,	W. J. Edwards, sack maker, 15, York Street, Liverpool.	,, ,,	Neglecting to affix prescribed Abstract - -	0 10 0	0 4 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
May 17	M. J. Sheridan, tailor, 14, Duke Street, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Neglecting to affix prescribed Abstract - -	0 10 0	0 4 6	
"	H. A. Smith, confectioner, 101, Great George Street, Liverpool.	" "	Neglecting to affix prescribed Abstract -	0 10 0	0 4 6	
"	North-Western Educational Trading Co., 59, Cornwallis Street, Liverpool.	"	Neglecting to affix prescribed Abstract - -	0 10 0	0 4 6	
"	Sarah Bibby, dressmaker, 79, Admiral Street, Liverpool.	" "	Occupier of a workroom wherein a woman was employed after 4 p.m. on Saturday.	0 1 0	0 3 0	The woman said she was working for a friend and not for Mrs. Bibby.
"	Mary Ford, cap maker, 54, Upper Pitt Street, Liverpool.	" "	Neglecting to affix prescribed Abstract -	- -	0 4 6	Withdrawn on payment of costs; defendant being over 80 years of age and unable to attend.
June 2	Clara Tydd, confectioner, 67, Lime Street, Liverpool.	" "	(1.) Neglecting to comply with the provisions of the Act as to holidays.	2 0 0	0 8 6	The evidence showed that the child was employed early and late on every day of the week, including Sundays. She was bound apprentice to serve two years, partly in the bakehouse and partly in shop. She was so employed on Christmas Day, Good Friday, Easter Sunday, and Easter Monday, and had no weekly half-holiday.
"	" "	" "	(2.) Employing a child on Christmas Day -	1 0 0	0 4 6	
" 5	Misses E. and M. Bellis, dressmakers, Watling Street, Llanwrst.	J. Blackwall, Esq., Col. Johnson, and Dr. Evans, Llanwrst.	(1.) Employing females during the time fixed for a meal.	0 2 6	0 8 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
June 5	Misses E. and M. Bellis, dressmakers, Watling Street, Llanwrst.	J. Blackwall, Esq., Col. Johnson, and Dr. Evans, Llanwrst.	(2.) Employing females between 8 a.m. and 8 p.m. with only one hour allowed for meals.	0 2 6	0 15 6	
"	Wm. Beetham, aërated water manufacturer, Llanwrst.	" "	(1.) Neglecting to affix Abstract at entrance to the works.	- -	0 7 0	Withdrawn on payment of costs. The defendant stating that the Abstract was hung up in his office, which was locked up when the Inspector visited.
"	" "	" "	(2.) Neglecting to keep his factory in a cleanly state.	0 2 6	0 9 0	
"	Llewelyn Jones, smith, Denbigh Street, Llanwrst.	" "	Neglecting to fence fly-wheel of engine -	0 2 6	0 8 0	
" 21	Davies & Co., enamelled letter makers, 323, Mill Street, Liverpool.	W. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 [illegible]	Unregistered workshops.
"	John Pope, tailor, 138, Upper Warwick Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	The Liverpool Vinegar Co., 69, Henry Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	Mair Davies, dressmaker, 28A, Bold Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
"	Ellen McDonald, vest maker, 44, Edinburgh Road, Liverpool.	" "	(1.) Employing four females overtime without record.	0 1 0	0 8 6	The defendant was stated to be a widow dependent on herself.
"	" "	" "	(2.) Employing four females overtime in a room with capacity of only 710 cubic feet.	0 1 0	0 4 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
June 21	Thomas Bros., dressmaker, 215, London Road, Liverpool.	N. J. Stewart, Esq., Stipendiary, Dale Street, Liverpool.	Employing four women at 10.25 p.m. - -	1 0 0	1 6 0	
"	" "	" "	Employing four women overtime, without record.	0 10 0	0 4 6	
"	Morris Goldberg, tailor, 31, Stafford Street, Liverpool.	" "	Employing four females at 4.35 p.m. on Saturday.	2 0 0	0 17 0	
"	Winstanley and Walker, printers, 7, Moss Street. Liverpool.	" "	Neglecting to fence fly-wheel and crank of gas engine.	2 0 0	0 4 6	
"	Rice and Cosgrove, sack makers, 6, Jackson Lane, Liverpool.	" "	Employing a woman at night, viz., at 3.45 a.m.	1 0 0	0 4 6	
"	Sarah A. Fyans, wig maker, 18, Mount Pleasant, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	Unregistered workshops.
"	P McManus, tailor, 20, Tithebarn Street, Liverpool.	" "	Neglecting to keep affixed the prescribed Abstract of the Act.	0 10 0	0 4 6	
" 26	E. and E. Parry, dressmakers, 27, St. Michael's Road, Liverpool.	C. Langton and A. M. Turner, Esqs., Islington Court House, Liverpool.	Employing four females after 8 p.m. - -	0 10 0	1 10 0	
"	" "	" "	Employing three females after 4 p.m. on Saturday.	0 2 6	0 17 6	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
June 28	Monk and Newell, brick makers, Seacombe.	Jas. Smith, F. Pooley, Esqs., and Dr. Bell, Liscard Court House, Cheshire.	Neglecting to keep registers of young persons employed.	- -	0 4 6	It is very little use taking cases before this Bench. All the defendants pleaded guilty, but no penalties were inflicted, and not for the first time in this court, the Home Office were mulcted in costs in the last case, although a plea of guilty was given. Costs to be paid by the Home Office.
"	James Elmore, brick maker, Seacombe.	"	Neglecting to keep affixed the prescribed Abstract of the Act.	- -	0 4 6	
"	Thos. Williams & Co., ore crushers, Seacombe,	" "	Neglecting to send notice of commencing to occupy factory.	- -	0 4 6	
"	" "	" "	Neglecting to keep affixed prescribed Abstract of the Act.	- -	0 3 6	
July 10	Halkyn Lime Co., Rhydymwyn, North Mold.	E. H. Waln, and J. Watkinson, Esqs., and others; Mold.	Neglecting to keep registers of the young persons employed.	0 2 6	0 7 6	
"	South Buckley Rock Brick Co., Buckley.	" "	Neglecting to keep registers of the young persons employed.	0 2 0	0 18 0	A fine of 1*l*., including costs, was inflicted.
"	" "	" "	Neglecting to obtain certificates of fitness for two young persons and two children.			
" 18	D. W. Jeffreys, shirt maker, 179, Strand Road, Bootle.	J. Howard, B. Cairn, and J. Bruce, Esqs.; Bootle.	Employing three females at 10 p.m., contrary to the Statute.	0 7 6	0 10 6	
Aug. 2	Rose H. Simpson, dressmaker, 23, Isaac Street, Liverpool.	J. Kingham, Esq., Deputy Stipendiary, Dale Street, Liverpool.	(1.) Neglecting to give notice of commencing to occupy workshop.	0 5 0	0 4 6	
"	" "	" "	(2.) Neglecting to keep affixed the prescribed Abstract.	0 5 0	0 4 6	
" 23	Geo. Smith & Co., brick makers, Hawthorn Road, Bootle.	W. Poulson, J. Wells, and T. Fellows, Esqs.; Bootle.	(1.) Neglecting to keep affixed the prescribed Abstract of the Act.	0 2 6	0 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
Aug. 23	Geo. Smith & Co., brick makers, Hawthorn Road, Bootle.	W. Poulson, J. Wells, and T. Fellows, Esqs.; Bootle.	(2.) Neglecting to keep register of the young persons employed in the factory.	0 2 6	0 7 0	
" 28	Kate Martin, dressmaker, 13, Queen Street, Rhyl.	Dr. Girdlestone, J. Strachan, Esq., and four others, Rhyl Town Hall.	(1.) Employing four females at 8.23 p.m., without conforming to Section 14 of the Factory Act, 1891, as to employment overtime.	0 10 0	0 7 0	
"	" "	" "	(2.) Employing four females overtime, without having complied previously with Section 66 of the Factory Act of 1878.	0 1 0	0 7 0	
"	Daniel Evans, milliner and dressmaker, High Street, Rhyl.	" "	Employing one woman at 9.25 p.m., without conforming to Section 14 of the Factory Act, 1891, as to employment overtime.	- -	0 6 0	Dismissed. The woman went into the witness-box and stated that she was at work at her own hat, and was only employed as saleswoman after 8 p.m.
Oct. 11	Ann Devane, dressmaker, 182, Burlington Street, Liverpool.	W. J. Stewart, Esq., Stipendiary, City Police Court, Liverpool.	Employing two women and one female young person overtime (at 9.3 p.m.) without keeping affixed in the workroom a notice with the prescribed particulars of such employment, September 1st.	1 10 0	0 13 6	
"	Ellen Davies, tailoress, 16, Clarence Street, Liverpool.	" "	Employing three women and seven female young persons overtime (at 8.12 p.m.) without keeping affixed in the workroom a notice with the prescribed particulars of such employment, September 8th.	0 10 0	0 4 6	
"	Sarah Ellen Bevins, dressmaker, 16, Moses Street, Liverpool.	" "	Employing two females after 4 p.m. (at 4.25 p.m.) on Saturday, September 30th.	0 5 0	0 8 6	

Return of Prosecutions—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1893.			*In the Liverpool District*—cont.	£ s. d.	£ s. d.	
Oct. 12	William S. Dodson, baker, 73, Market Street, Hoylake.	S. Eddows and John Elliott, Esqs., County Police Court, Abbey Street, Birkenhead.	Neglecting to keep affixed the prescribed Abstract.	0 1 0	0 4 6	
"	" "	" "	Employing a boy 16 years of age before 5 a.m. (at 2 a.m.) in the bakehouse, September 2nd.	0 1 0	0 4 6	The boy said he had gone to work at 2 a.m. of his own free will, in order that he might get away earlier to watch a regatta.
1892.			*In the Ashton-under-Lyne District.*			
Nov. 30	E. B. Rumney, calico printer, Watford Bridge, New Mills.	James Hibbert, Joel Wainwright, and Thos. Carver, Esqs., Town Hall, New Mills.	Employing two young persons after 6 p.m., viz., at 7.50 p.m.	2 0 0	1 1 6	
"	The Kinder Printing Co., near Hayfield, calico printers.	" "	Employing a young person during part of a meal time and after the end of the specified period of employment, viz., at 5.45 p.m.	0 5 0	0 14 6	2*s.* 6*d.* of the 14*s.* 6*d.* costs, was an allowance made by the Bench to the witness.
1893.						
April 10	The Broadbottom Mills Co., Limited, cotton spinners, Broadbottom, near Glossop.	Edward Chapman (Chairman), and Thos. Beeley, Esqs., County Police Court, Hyde.	Allowing six young persons to remain in a room during part of a meal time, whilst a manufacturing process was being carried on, viz., at 12.35 p.m.	0 5 0	2 4 0	5*s.* and costs in one case, costs in remainder.
" 13	Henry Ryan, dressmaker, 259, Stamford Street, Ashton-under-Lyne.	Isaac Boulton (Chairman), S. H. Swire, Enoch Turner, and John Unwin, Esqs., Town Hall, Ashton.	Employment of one woman after 4 p.m. on Tuesday, March 28th, 1893.	0 2 6	0 14 0	
"	Reuben Lord Buckley, milliner and dressmaker, 238, Stamford Street, Ashton-under-Lyne.	" "	Employment of three young persons after 4 p.m. on Tuesday, March 28th, 1893.	- -	1 7 0	I did not press these cases; asked for nominal penalty only; defendant ordered to pay costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Ashton-under-Lyne District—cont.	£ s. d.	£ s. d.	
1893.						
April 13	Mrs. Annie Lawton, milliner, 276, Stamford Street, Ashton-under-Lyne.	Isaac Boulton (Chairman), S. H. Swire, Enoch Turner, and John Unwin, Esqs., Town Hall, Ashton.	Employment of one woman and one young person after 4 p.m. on Tuesday, March 28th, 1893.	- -	0 18 0	This was similar to case above, defendant to pay costs.
„ 26	John Wm. Greenwood, wheelwright, Plantation Ground, Stalybridge.	Alderman John Cocker, (Mayor), Jas. Harrison, and Geo. Hopwood, Esqs., Town Hall, Stalybridge.	Employment of a young person after 6 p.m. on Friday, April 14th, 1893, viz., until 8.25 p.m.	0 1 0	0 9 0	Magistrates were lenient on first offence, saying they would be more severe should there be a second conviction.
May 10	J. Worth & Co., indiarubber manufacturers, Edge Lane, Droylsden.	Ralph Bates (Chairman), John E. Mellor, Esqs., and Dr. W. H. Hughes, Town Hall, Ashton.	Employment of two young persons after 6 p.m. on Friday, April 21st, 1893, viz., to 8.25 p.m.	1 0 0	1 9 0	
„ 29	John Fletcher and Sons, cotton spinners, Birch Mills, Ashton.	Job Fisher (Chairman), John Unwin, Samuel Kitchen, and Thos. Ellison, Esqs., Town Hall, Ashton.	Failing to send to H.M. Inspector and certifying surgeon written notice of an accident which occurred at their mills on Friday, April 21st, 1893.	- -	0 5 6	Chairman said that trade was bad, and masters had been harassed, they therefore fined in costs only.
„	The Misses Kemshall, dressmakers, Stamford Arcade, Ashton.	„ „	Employment of five women and two young persons before 8 a.m. on Saturday, May 13th, 1893, overtime being also worked from 8 p.m. to 9.30 p.m.	-	2 16 0	Magistrates were again very lenient, simply saying that it must not occur again.
June 5	Henry Howcroft, 4, Fern Street, Newton, minder in the employment of the Astley Mill Co., Limited, Dukinfield.	Alexander C. Boyd (Chairman), and John E. Mellor, Esqs., Police Court, Dukinfield.	Employment of a young person during the dinner hour on May 23rd, 1893.	0 2 6	0 7 6	As I did not press this case, a penalty of 10*s.*, to include costs, was awarded, which was apportioned as follows: 2*s.* 6*d.* penalty, 7*s.* 6*d.* costs. As the costs exceeded 7*s.* 6*d.* I had to pay the difference 2*s.* 6*d.* for the witness' summons.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Ashton-under-Lyne District*—cont.	£ s. d.	£ s. d.	
June 19	Peter Wood, milliner and dressmaker, 53, High Street West, Glossop.	Jas. Sidebottom (Chairman), and Wm. Dawson, Esqs., Town Hall, Glossop.	Employment of six women and two young persons after 8 p.m. on Saturday, June 3rd, 1893, viz., until 11.20 p.m.	1 0 0	3 13 0	
"	"	" "	Employment of one woman after 8 p.m. on Saturday, May 20th, 1893, viz., until 12.30 a.m. on Sunday, May 21st, 1893.	0 2 6	0 9 6	
"	George Hyde, milliner, Borough House, High Street West, Glossop.	" "	Employment of a woman after 8 p.m. on Saturday, June 3rd, 1893, viz., until 11.5 p.m.	0 2 6	0 10 6	
July 31	Bowden Bros., sugar boilers, Water Street, Ashton.	John Wilson (Chairman), Allen Shaw, A. W. Siddall, and S. Kitchen, Esqs., Town Hall, Ashton.	Failing to affix Abstract on July 12th, 1893.	- -	0 8 6	As this was the first case of the kind in this district I asked only for a nominal penalty to carry costs. A penalty of 1*s.* and costs was imposed, the penalty to be remitted if costs were paid.
Aug. 2	John Lees, cotton spinner, Albion Mill, Uppermill.	George F. Buckley (Chairman), B. Bent, Hy. Mallalieu, G. A. Schofield, and J. L. Byrom, Esqs., Mechanic's Institute, Uppermill.	Employment of two women and three female young persons during the dinner hour on Friday, July 7th, 1893.	0 2 6	3 0 0	
" 7	J. H. Gartside & Co., Limited, calico printers, Buckton Vale, Stalybridge.	John Cocker, (Mayor, Chairman), and Saml. Thackeray, Esqs., Town Hall, Stalybridge.	(1.) Employment of two women before 6.30 a.m., and after 6 p.m. on Wednesday, July 19th, 1893.	- -	- -	The firm summoned Thos. Poole as the actual offender; he was fined 10*s.* and costs in each case, the costs to include all expenses incurred by me in my action against the firm.
"	Thomas Poole, foreman in engraving room of above works.	" "	(2.) Employment of two women before 6.30 a.m., and after 6 p.m. on Wednesday, July 19th, 1893.	1 0 0	0 19 0	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Ashton-under-Lyne District*—cont.	£ s. d.	£ s. d.	
Aug. 9	Samuel Broadbent, cashier to John Broadbent and Son, cotton spinners, Oakfield Mill, Droylsden.	Jas. W. Summers (Chairman), and Thos. Jackson, Esqs., Town Hall, Ashton-under-Lyne.	Making false entry in register as to the employment of a young person.	0 5 0	0 12 0	
Oct. 5	Wm. Underwood and Bros., builders and contractors, Hope Street, Dukinfield.	A. C. Boyd (Chairman), Wm. Storrs, Wm. Harrison, J. Donnell, and G. Newton, Esqs., Police Court, Dukinfield.	Failing to give notice of occupation of factory	- -	0 6 0	A penalty of 2*s.* 6*d.*, to include costs was inflicted, as costs amounted to 6*s.*, I had to pay 3*s.* 6*d.*
„ 19	The Milton Spinning Co., cotton spinners, Mossley.	J. M. Clementson (Chairman), G. Mills, Jas. Buckley, J. W. Buckley, W. E. Radcliffe, Esqs., and Dr. Schofield. Town Hall Mossley.	Employment of three young persons during dinner hour on Thursday September 28th, 1893.	0 3 0	1 13 0	1*s.* and costs in each case. I did not press these cases, as they were the first I had taken in Mossley.
„	John Robinson, spinner at the Milton Spinning Co., Limited, 47, Arundel Street, Mossley.	„ „	Employment of a child during dinner hour on Thursday September 28th, 1893.	- -	0 10 0	Convicted in costs only.
1892.			*In the Stockport District.*			
Nov. 4	John B. Lees, silk throwster, Mount Pleasant Mills, Macclesfield.	T. Brough (Mayor), and J. Kershaw, Esqs., Police Court, Macclesfield.	Employing two young persons and one child in a manufacturing process during the dinner hour.	- -	0 19 6	Convicted in costs only. The Mayor stated that this being the first case before the Bench they would be lenient. He wished it to be understood that working during the dinner, or other meal time, was illegal, and the custom must be stopped.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Stockport District*—cont.	£ s. d.	£ s. d.	
Nov. 4	John Ashworth, fancy box maker, 2, Bridge Street, Macclesfield.	T. Brough (Mayor), and J. Kershaw, Esqs., Police Court, Macclesfield.	Failing to affix Abstract in his workshop	- -	0 6	Withdrawn; the defendant paid costs.
„ 7	Joseph Adamson & Co., boiler makers, Hyde.	Mark Ashton and Arthur Aspland, Esqs., Police Court, Hyde.	Employing two young persons after hours, to wit, at 7.20 p.m. on 21st October.	0 5 0	0 12 0	Penalty in one case, costs in both.
„	W. H. Marland & Co., iron founders, Manchester Road, Hyde.	„ „	Employing two young persons after hours, to wit, at 7.0 p.m. on 21st October.	0 5 0	0 12 0	Penalty in one case, costs in both.
„ 14	Michols, Lucas, & Co., cotton spinners, Kingston Mills, Stockport.	John Turner (Mayor), E. Hallam, W. Lees, and L. Rivett, Esqs., Police Court, Stockport.	Allowing four women to remain in a room during a meal time while a manufacturing process was going on, viz., at 5.36 p.m. on 27th October.	1 0 0	2 0 0	5*s.* and costs in each case.
„	James Lomas, cotton spinner, Joules Court, Stockport.	„ „	Allowing three young persons to remain in a room during a meal time while a manufacturing process was going on, viz., at 5.57 p.m. on 28th October.	0 5 0	0 9 0	
„	The Portwood Spinning Co., cotton spinners, Portwood, Stockport.	„ „	Allowing two young persons to clean machinery during the dinner hour on 21st October.	0 10 0	0 18 0	5*s.* and costs in each case.
„ 15	George T. Harris, letterpress printer, 15, Hightown, Crewe.	J. Ainsworth (Chairman), John Thomas, and Wallace Lumb, Esqs., Police Court, Crewe.	Failing to affix the prescribed Abstract in his factory.	0 2 6	0 8 6	
„	„ „	„ „	Employing one young person for more than seven days uncertified, viz., about 14 months.	0 2 6	0 8 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Stockport District*—cont.	£ s. d.	£ s. d.	
Dec. 7	Peter Davenport, silk manufacturer, Macclesfield.	John Swindells (Mayor), T. Brough, and T. Lockett, Esqs., Town Hall, Macclesfield.	Employing one young person and one female in factory at 7.25 p.m. on 18th November.	2 0 0	0 18 6	
1893.						
Jan. 19	Tipping and Plant, cotton spinners, Romiley.	Colonel C. J. Howard and A. H. Sykes, Esqs., County Petty Sessions, Stockport.	Two young persons and two women cleaning machinery during dinner hour.	1 5 0	1 18 0	10*s.* and costs in one case, 5*s.* and costs in others.
" 24	John Greenhalgh, Limited, preserve manufacturers, Reddish, Stockport.	J. H. P. Leresche, Esq., Stipendiary, County Petty Sessions, Strangeways, Manchester.	Failing to affix the Abstract of the Factory and Workshops Act.	1 0 0	0 11 6	
Feb. 6	T. and J. Leigh, Limited, cotton spinners, Bee Hive Mills, Stockport.	John Turner (Mayor), Wm. Lees, and T. Hidderley, Esqs., Court House, Stockport.	Employing two women in factory before hours, to wit, at 5.55 a.m. on 13th January.	1 0 0	1 0 0	10*s.* and costs in each case.
"	Isaac Frank, tailor, 9, Swaine Street, Stockport.	" "	Failing to enter the overtime on the prescribed form when women were employed after 8 p.m. on 12th January.	- -	0 5 6	This being the first case in the district for illegal overtime under Act of 1891 I did not press it. The man being very poor the Bench convicted in costs only.
" 15	Dean & Co., Limited, hat trimming manufacturers, St. Petersgate, Stockport.	John Turner (Mayor), W. Gilmore, and W. L. Askrigge, Esqs., Police Court, Stockport.	Failing to enter the overtime on prescribed form when young persons were employed overtime on 26th January.	0 10 0	0 15 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stockport District*—cont.	£ s. d.	£ s. d.	
Mar. 22	The Hyde Paper Co., Limited, paper manufacturers, Houghton, Denton.	W. W. Cooke and C. T. Bradbury, Esqs., Petty Sessions Town Hall, Ashton-under-Lyne.	Failing to keep a register of young persons -	0 5 0	0 12 0	
"	" "	" "	Employing two young persons under 16 years more than seven days (five months) without a medical examination by the certifying surgeon.	0 10 0	1 9 0	5*s.* and costs in each case.
" 27	Joseph Haighton, clothier, Hospital Street, Nantwich.	Baron Schroeder (Chairman), and Surgeon-Major Hale, V.C., County Police Office, Nantwich.	Failing to register and record the overtime on 10th February, when six females were working at 8.58 p.m.	0 5 0	0 9 6	
"	A. Heap & Co., clothiers, Mill Street, Nantwich.	Surgeon-Major Hale, V.C., and James Bayley, Esq., County Police Office, Nantwich.	Failing to register and record the overtime on 10th February, when a number of females were working at 8.45 p.m.	1 0 0	0 9 6	Mr. Heap (the manager) had the case adjourned to the last hearing, in order to instruct a solicitor. H.M. Inspector informed the Bench he had previously requested the manager to comply with the requirements of the Act, if overtime was worked.
April 17	Pollock and Macnab, engineers, Hyde.	E. Chapman and J. Shenton, Esqs., Police Court, Hyde.	Failing to produce the register of young persons.	0 2 6	0 9 6	
"	" "	" "	Employing three young persons more than seven days (from *two* to *twelve* months) uncertified.	1 10 0	1 16 0	
"	Waddington & Co., Limited, rubber manufacturers, Hyde.	"	Employing two young persons during illegal hours on the 7th instant, viz., until 9.30 p.m.	0 10 0	0 19 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stockport District*—cont.	£ s. d.	£ s. d.	
April 17	Tetlow Bros., aërated water manufacturers, Hyde.	E. Chapman and J. Shenton, Esqs., Police Court, Hyde.	Failing to affix in the factory the prescribed Abstract of the Act.	0 2 6	0 8 6	
"	Moores, Birkby and Brown, hat manufacturers, Windmill Works, Denton.	Joseph Hadwen (Chairman), W. W. Cooke and B. Mason, Esqs., Police Court, Ashton under-Lyne.	Overcrowding in one workroom during overtime employment.	2 0 0	0 12 0	
"	Wilde and Booth, hat manufacturers, Wilton Street, Denton.	" "	Failing to record overtime - - -	1 0 0	0 14 6	This was a bad case, as overtime had been worked on more than 48 times during this year, and no entry made, notwithstanding a previous caution.
"	Joseph Wilson and Sons, hat manufacturers, Wilton Street, Denton.		Failing to record overtime - - -	0 10 0	0 14 6	
"	J. Marlor and Sons, hat manufacturers, Taylor Lane, Denton.	" "	Failing to record overtime -	0 10 0	0 12 0	
" 24	John Walton, yarn bleacher, Heaton Mersey, Stockport.	Scott Lings and F. W. Scott, Esqs., Vestry Hall, Heaton Norris, Stockport.	Employing two children otherwise than on the system of alternate days, or half days.	0 10 0	1 7 0	5*s.* and costs in each case. These children (with others) were employed each week in the morning set, including each Saturday, or a total of 39 hours per week.
May 1	James Wood and Son, brick makers, Wistaston, Crewe.	J. Bailey, Esq. (Chairman), Surgeon-Major Hale, V.C., Police Court, Crewe.	Failing to affix Abstract in factory - -	- -	0 4 6	Withdrawn on payment of costs. The Magistrates were of opinion that defendants acted in ignorance. I pointed out to the Magistrates that the defendants occupied another factory which had periodically been visited by H.M. Inspector. Therefore they were not in ignorance of the Act.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stockport District*—cont.	£ s. d.	£ s. d.	
May 10	Mary Maskery, baker and confectioner, Sandbach.	A. J. Solly (Chairman), and G. B. Baker, Esqs., Court House, Sandbach.	Employing one young person aged 15 years in bakehouse at 9.15 p.m.	0 11 6	0 8 6	
"	" "	" "	Failing to affix the prescribed Abstract	- -	0 4 6	Convicted in costs only.
" 15	J. Boon & Co., leather dressers, Gee Cross, Hyde.	Mark Ashton (Chairman), and S. Horsfield, Esqs., Police Court, Hyde.	Failing to affix Abstract in factory	0 1 0	0 7 6	Mr. Boon pleaded ignorance of the Act, and as the managing partner had withdrawn from the firm just prior to my visit, I suggested a small penalty would meet the case.
" 16	Samuel Mealor, smith, Bright Street, Crewe.	Dr. Hodgson (Mayor), Wallace Lumb and Wilmot Eardley, Esqs., Police Court, Crewe.	Employing one young person aged 14 years after hours, to wit, at 8.25 p.m.	- -	0 5 6	Convicted in costs only.
June 3	Harriett Shufflebotham, dressmaker, 8, Market Street, Buxton.	H. A. Hubbersty, Esq. (Chairman), Dr. Shipton and Dr. Dickson, Town Hall, Buxton.	Failing to affix Abstract in workshop	0 1 6	0 8 6	Fined 10*s.*, including costs.
"	Kate and Ellen Porter, dressmakers, 32, Market Street, Buxton.	" "	Failing to affix Abstract in workshop	- -	0 10 0	Fined 10*s.*, including costs.
"	The Chee Tor Mineral Water Co., aërated water manufacturers, Market Street, Buxton.	" "	Failing to affix Abstract in workshop	- -	0 10 6	Fined 10*s.*, including costs.
"	Carter and Carruthers, confectioners, Spring Gardens, Buxton.	" "	Failing to affix Abstract in workshop	- -	0 15 0	Fined 10*s.*, including costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stockport District*—cont.	£ s. d.	£ s. d.	
June 3	Carter and Carruthers, confectioners, Spring Gardens, Buxton.	H. A. Hubbersty, Esq. (Chairman), Dr. Shipton and Dr. Dickson, Town Hall, Buxton.	Employing two women at 3.25 p.m. on half-holiday, 13th May.	1 0 0	1 18 0	10*s.* and costs in each case.
"	Henry Kelcey, confectioner, The Grove, Buxton.	" "	Employing one female young person in bakehouse at 3.30 p.m. on half holiday, 13th May.	- -	0 11 0	Dismissed. The girl, in giving evidence on oath, stated she was making "bun" paste at 3.30 a.m. when I found her working, but further added that she left off her ordinary work at noon, and had only just gone down into the bakehouse for amusement, when I called; no explanation was given when offence was discovered.
July 11	J. N. Woodbridge, firewood manufacturer, 888, West Street, Crewe.	Wm. McNeill and John Thomas, Esqs., Petty Sessions, Crewe.	Employing one child aged 12 years, full time -	- -	0 8 6	Convicted in costs only.
" 26	The Dairy and Domestic Salt Co. Limited, salt manufacturers.	Captain Leigh (Chairman), W. R. Court, Esq., Town Hall, Middlewich.	Employing one young person in salt works at 8.40 p.m. on 18th May 1893 viz., William Taylor.	0 5 0	0 10 6	The company summoned the boy's father Richard Taylor as the actual offender.
"	Richard Taylor, salt panman to above company.	" "	Employing his son contrary to their knowledge, consent, or connivance at 8.40 p.m.	- -	- -	Dismissed. The Magistrates held that the company must be held primarily responsible, or the ends of justice would be defeated.
Aug. 7	Elizabeth Jackson, confectioner, 80, Mill Street, Macclesfield.	J. W. H. Thorpe and Wm. Whiston, Esqs., Town Hall, Macclesfield.	Employing two females after hours on half-holiday, to wit, at 3.20 p.m.	0 2 6	1 0 6	Penalty in one case only.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stockport District*—cont.	£ s. d.	£ s. d.	
Aug. 8	T. and J. Smith, cotton doublers, Junction Mill, Stockport.	J. Turner, (Mayor), and Wm. Gilmore, Esqs., Police Court, Stockport.	Employing one young person under 16 years, more than seven days uncertified.	0 2 6	0 13 6	The occupiers were cautioned on 20th January 1893, respecting the same young person.
"	Vernon Cotton Spinning Co. Limited, cotton spinners, Stockport.	" "	Employing three women before 6.0 a.m. on 28th July, to wit, at 5.55 a.m.	1 10 0	1 17 6	10s. and costs in each case.
"	David Hall, milliner, 26, Lower Hillgate, Stockport.	" "	Failing to record overtime in his workshop on 22nd July.	0 2 6	0 9 0	
Sept. 11	The Ravenfield Braid Co., braid manufacturers, Macclesfield.	John Berchenough (Chairman), and Josiah Smale, Esqs., Town Hall, Macclesfield.	Failing to affix Abstract - - - -	2 0 0	0 10 0	Maximum penalty in each case. The firm had been working about four years, employing children and young persons, and during that time had totally ignored the Act.
"	" "	" "	Failing to keep register of children and young persons.	2 0 0	0 10 0	
" 14	The Goyt Mill Co., cotton manufacturers, Whaley Bridge.	Colonel Howard (Chairman), James Leigh, Esqs., Police Court, Stockport.	Allowing six females to remain in a room during a portion of a meal time while a manufacturing process was going on, viz. 7th August.	2 5 0	2 17 0	20s. fine in one case. 5s. fine in each of five cases, costs in all.
"	" "	" "	Allowing six females to remain in a room during a portion of a meal time while a manufacturing process was going on, viz. 8th August.	2 5 0	2 18 0	20s. fine in one case. 5s. fine in each of five cases, costs in all.
" 19	Joseph Emerson, clothier, Earle Street, Crewe.	Wallace Lumb, W. McNeill, Esqs., Police Court, Crewe.	Failing to record overtime, when females were employed until 9 p.m., on 25th August.	0 2 6	0 8 6	
"	Wm. Wade, builder, Market Street, Crewe.	"	Employing one young person more than seven days uncertified.	- -	0 6 0	Withdrawn; defendant paid costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stockport District*—cont.	£ s. d.	£ s. d.	
Sept. 21	The Slack Mill Company, Limited, cotton manufacturers, Hyde.	Joseph Wilde (Mayor) and John Cooke, Esqs., Police Court, Hyde.	Allowing a young person to clean machinery during a portion of a meal time.	0 1 0	0 10 0	First case in Hyde for this offence. Nominal penalty only asked for.
Oct. 16	T. and J. Leigh, Limited, wool spinners, Hope Mill, Stockport.	John Turner, Esq. (Mayor), Col. Turner, and Lieut.-Col. Wilkinson, Police Court, Stockport.	Allowing three females to remain in a room during a portion of a meal time while a manufacturing process was going on, to wit, at 8.23 a.m., on 28th ult.	- -	0 15 6	Fined only in costs. The Magistrates stated it only appeared a technical offence, seeing that the firm were only working from 8.30 a.m. to 4.0 p.m.; they could legally have commenced work at 8.0 a.m., had they altered the period on the Abstract and notified me.
1892.			*In the Sheffield District.*			
Nov. 24	John Bradshaw, tailor, 119, Devonshire Street, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield.	Having failed to give notice of beginning to occupy a workshop.	1 13 0	0 7 0	
"	Rolley and Beardshaw, milliners, 54, The Mall, Sheffield.	" "	Having failed to give notice of beginning to occupy a workshop.	1 3 0	0 7 0	
Dec. 17	Joseph S. Watson, ship and boat builder, Beckingham Yard, Gainsborough.	P. Huntsman, Esq., J.P., and E. Harcourt Vernon, Esq., J.P., Retford Police Court.	Employment of seven young persons without certificates of fitness.	0 10 0	2 1 3	Irregularities extended over a period of more than six months. The Bench decided to impose a penalty in the worst case, and order the payment of costs in the other cases.
"	" "	" "	Having failed to enter the prescribed particulars relating to young persons employed in the prescribed Register.	- -	0 5 3	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Sheffield District*—cont.	£ s. d.	£ s. d.	
Dec. 21	Carr & Co., Down clothing manufacturers, North Pavement, Barnsley.	John Kay, Esq., J.P., and Charles Harvey, Esq., J.P., Barnsley.	Employment of three young persons without certificates of fitness.	1 0 0	1 16 0	Defendants through their solicitor pleaded guilty and promised not to transgress again. I therefore asked for penalties in two cases and withdrew the others on payment of costs.
"	"	" "	Employment of three young persons after 7 p.m., to wit, at 8.45 p.m.	1 0 0	1 7 0	
"	Alfred Atkinson, joiner and upholsterer, Westgate, Barnsley.	" "	Having failed to affix the prescribed Abstract in his workshop.	0 10 0	0 9 0	Defendant had failed to report occupation of a new workshop.
" 29	The Parkgate Iron and Steel Company, blast furnaces, The Holmes, Rotherham.	W. H. Gummer (Mayor), and Geo. Eskholme, Esqs., J.P., Town Hall, Rotherham.	Illegal employment of a young person on Sunday, December 4th.	- -	0 9 6	Young person was employed in the "long turn." The company asked me to withdraw on payment of costs, urging that this was the first complaint against them and that the manager had retained a letter addressed to them instead of bringing it to their notice. I consented.
1893.						
Jan. 9	Paul and Dowson, tailors, 347, Infirmary Road, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield Town Hall.	Having failed to affix Abstract with the prescribed particulars in their workshop.	1 0 0	0 7 0	A new workshop. No notice of occupation given.
" 12	George Cawood, iron foundry, Rawmarsh Road, Rotherham.	W. H. Gummer (Mayor), and Geo. Neale, Esqs., J.P., Rotherham Police Court.	Employment of two young persons after 6 p.m., to wit, at 7.35 p.m.	0 2 0	1 1 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Sheffield District*—cont.	£ s. d.	£ s. d.	
Jan. 19	Herbert Dobson, saw mill occupier, Albion Street, Grimsby.	Geo. Doughty (Mayor), H. J. Veale, Esqs., J.P., and a full Bench, Grimsby Town Hall.	Employment of three children aged 13 after 6 p.m., to wit, at 7.20 p.m.	0 3 0	0 14 0	The Mayor thought it severe on defendant that he should have been summoned, as the children had had holidays at Christmas, and the Government had urged corporations to find employment for the unemployed. I pointed out that whilst these children worked illegal and excessive hours, others were hungry outside. In two cases costs remitted by Bench.
„ 27	William Lavender, tailor, 14, Court Addy Street, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield Town Hall.	Having failed to give notice of beginning to occupy a workshop.	1 0 0	0 7 0	
Feb. 18	Walter Jessop, sheet parer, in the employment of the Sheffield Forge and Rolling Mills Company, Mill Sands, Sheffield.	„ „	Employment of a young person from 6.30 a.m. to 8.30 p.m.	0 7 6	0 10 0	It having been proved that the company had used all due diligence the information was laid against the actual employer.
„	H. M. Kay, letterpress printer, 1, Spital Street, Sheffield.	„ „	Having failed to give notice of having begun to occupy a factory.	0 8 0	0 7 0	
Mar. 15	Wm. Bramhall, blade forger, Exchange Works, Sheffield.	W. J. Clegg, J.P., and Jos. Gamble (Deputy Mayor), Esqs., Sheffield City Hall.	Employment of a young person after 8 p.m. -	- -	0 5 6	In all these cases defendants were operatives in a small way of business; they expressed regret so I withdrew the cases on payment of costs, a course approved by the bench.
„	Wilfred Bell, blade smith, Exchange Works, Sheffield.	„ „	Employment of a young person after 8 p.m. -	- -	0 5 6	
„	Francis Wilkinson, cutler, Exchange Works, Sheffield.	„ „	Employment of a woman after 8 p.m. -	- -	0 5 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Sheffield District*—cont.	£ s. d.	£ s. d.	
May 12	J. W. Dobson, glass bottle manufacturer, The Oaks Glass Bottle Works, Barnsley.	Walter Norton and Ed. Lancaster, Esqs., J.P., Barnsley.	Employing a child (aged $13\frac{8}{12}$, and passed 4th Standard) for more than seven days without a certificate of fitness.	1 0 0	0 15 0	
" 24	Saml. Williamson and Sons, cutlery manufacturers, Edward Street, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield Town Hall.	Having failed to keep prescribed Register of young persons.	1 0 0	0 6 0	
"	" "	" "	Having failed to procure certificate of fitness for employment of four young persons.	1 0 0	1 12 6	Mr. Williamson expressed regret for negligence which he attributed to his son, so I consented to withdraw three cases on payment of costs.
June 2	Maurice Bernstein, tailor 4, Court Peacroft, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield Town Hall.	Having failed to affix and keep affixed the prescribed Abstract.	- -	0 3 6	Defendant begged for leniency urging great poverty and want of work, I consented to withdraw on payment of costs.
"	Mrs. Ada Savage, dressmaker, 176, Albert Terrace, Sheffield.	" "	Having failed to affix and keep affixed the prescribed Abstract.	1 0 0	0 7 0	Defendant who had given no notice of occupation was employing her hands at 9.50 p.m. when visited by H.M. Inspector.
" 5	Fanny Downs, dressmaker, 53, French Gate, Doncaster.	Thomas Abbot, Esq. (Mayor), and Robert Stockhill, Esq., J.P., Doncaster.	Having failed to affix and keep affixed the prescribed Abstract.	0 5 0	0 8 0	Defendant had failed to give notice of occupation.
" 19	Fred Hopper, bicycle manufacturer, Barton-on-Humber.	T. Tombleson, Esq., J.P., and the Rev. W. J. Wylie, J.P., Barton Police Court.	Employment of a young person after 6 p.m. -	0 10 0	0 4 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Sheffield District*—cont.	£ s. d.	£ s. d.	
June 11	S. J. C. Henderson, letter-press printer, Cleethorpes.	R. J. H. Parkinson, Esq., J.P., and the Rev. C. A. Alington, J.P., Grimsby County Police Court.	Having failed to give notice of beginning to occupy a factory.	0 3 6	0 6 6	
July 17	Hall's Barton Ropery Co., Barton-on-Humber.	Thos. Tombleson, Esq., J.P., and the Rev. W. J. Wylie, J.P., Barton Police Court.	Employment of a child on full time	0 10 0	0 6 0	
"	" "	" "	Having failed to obtain a certificate relating to the school attendance of a child.	—	0 2 6	As both informations related to the same child, I consented to withdraw this case on payment of costs.
" 19	B. Chapman & Co., aërated water manufacturers, Effingham Street, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield Town Hall.	Employment of two women overtime without having affixed the prescribed notice relating to such overtime in their factory.	0 1 0	0 11 0	First case under Clause 14 of this Act of 1891 in Sheffield; a small penalty asked for.
" 24	Mrs. W. H. Wilburn, dress-maker, 43, Cartwright Street, Doncaster.	John Abbot (Mayor), and E. Peniston, Esqs., J.P., Guildhall, Doncaster.	Neglecting to affix Abstract	0 2 6	0 8 0	
"	Mrs. Shillito, 42, Cartwright Street, Doncaster.	" "	Neglecting to affix Abstract	0 2 6	0 8 0	
" 31	Osborne & Co., Colonial Sanitary Engineering Works, Dronfield.	W. A. Milner, Esq., J.P., and Rotherham Cecil, Esq., J.P., Hemsworth Police Court.	Employment of a young person during a meal time.	0 5 0	0 12 0	
"	" "	" "	Having failed to obtain certificates of fitness for two young persons and three children.	1 5 0	3 0 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Sheffield District*—cont.	£ s. d.	£ s. d.	
Aug. 23	Carter Bros., linen manufacturers, Oak Mills, Barnsley.	M. C. Halton, Mayor, and John Kaye, Esqs., J.P., Barnsley Police Court.	Employment of five young persons without certificates of fitness.	1 15 0	4 5 0	In two cases names not registered.
"	Mary Ann and Martha Garner, dressmakers, 27, Eldon Street North, Barnsley.	" "	Having neglected to affix Abstract of the Act in their workroom.	0 1 0	0 9 6	Defendants had failed to give notice of occupation.
" 24	Taylor Sons & Co., wood turners, Walton Mills, Chesterfield.	John Naylor, Esq., J.P., and John Merrit Esq., J.P., Chesterfield Town Hall.	Employment of a young person and two children without certificate of fitness.	0 15 0	0 18 0	
" 28	Joseph Mycock, cutler, Rockingham Street, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield Town Hall.	Employment of a child after 7 p.m. - -	0 6 0	0 9 0	
" 4	Benjamin Waddington, rag grinder, Doncaster Road, Barnsley.	T. H. Taylor, Esq., J.P., and Charles Harvey, Esq., J.P., Barnsley Police Court.	Employing six women and two young persons after 6 p.m.	2 0 0	3 12 0	Defendant had been cautioned.
Sept. 22	Wheatman and Smith, saw manufacturers, Russell Works, Kelham Island, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield Town Hall.	Employment of four young persons without certificates of fitness.	4 0 0	1 12 0	
Oct. 16	Edgar Allen & Co., steel and file manufacturers, Tinsley, Sheffield.	H. Jubb, and Geo. Neill, Esqs., J.P., Rotherham Police Court.	Employment of two young persons without certificates of fitness.	- -	0 8 0	My colleague (owing to illness) could not attend to give evidence. The firm having expressed regret for the offences I consented to withdraw, defendants paying costs.
"	" "	" "	Having failed to enter names of young persons and prescribed particulars in register.	- -	0 4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Sheffield District—cont.	£ s. d.	£ s. d.	
1893. Oct. 18	Hewitt, Bunting & Co., candle-wick spinners, Walton Works, Chesterfield.	J. Marriott, Esq., J.P., and W. N. Manton, Esq., J.P., Chesterfield Police Court.	Having failed to procure certificates of fitness for employment of three young persons.	- -	- -	Adjourned. Solicitor for defendants stating that the surgeon had passed the young persons although his signature did not appear in the register produced. Owing to surgeon being ill case adjourned till October 23rd.
„ 23	„ „	„ „	Having failed to procure certificates of fitness for employment of three young persons.	3 0 0	3 16 0	These are the cases adjourned from October 18th. Costs include a fee to the surgeon for his attendance in court.
„ 31	Winifred Adams, dressmaker, Richmond Villa, Park Lane, Sheffield.	E. M. E. Welby, Esq., Stipendiary, Sheffield Town Hall.	Illegal employment of two women during the night and on the following day.	6 18 0	1 2 0	Fined 8*l.*, including costs. These hands worked from 8.30 a.m. on Tuesday October 10th till 6 p.m. on Wednesday October 11th, during that time they rested for 1½ hours during the forenoon of the 11th. No excuse but mourning order. Overtime notice said work had ceased at 10 p.m.
			In the Nottingham District.			
1892. Nov. 18	Thomas Adams & Co., Limited, bleachers and lace dressers, Basford, Nottingham.	L. J. McCraith, and L. J. Forman, Esqs., Nottingham.	Employing four women and three young persons before eight o'clock in the morning namely from 6 a.m. to 8 p.m.	3 0 0	4 6 0	20*s.* and costs in three cases. I withdrew the remaining four cases on payment of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Nottingham District*—cont.	£ s. d.	£ s. d.	
Nov. 25	William Lawrence, cabinet manufacturer, Nottingham.	J. P. Cox, and V. A Blair, Esqs., Nottingham.	Not reporting an accident to a young person -	3 0 0	1 5 0	The defendant had been previously warned, and has had several unreported accidents in his factories this year.
1893. Jan. 19	William Jackson, lace manufacturer, Sandiacre.	W. Merry, W. Tatham, and W. Crompton, Esqs., Ilkeston.	Employing two women after seven o'clock in evening.	0 5 0	1 10 0	Small penalties asked for.
" 19	E. and H. Longmore, lace manufacturers, Sandiacre.	" "	(1.) Employing a woman and a male young person under 16 years of age, after seven o'clock in the evening.	0 5 0	2 3 0 (for both cases)	I withdrew one case, that of the woman, a daughter of the firm, on payment of costs.
"	" "	" "	(2.) Employing a male young person above 16 years of age after seven o'clock in the evening, without affixing in their factory notice of their intention to avail themselves of a special exception under a part of the Act.	- -		The Magistrates considered that costs only would be sufficient in this case.
Feb. 3	G. & W. N. Hicking, lace dressers and bleachers, Nottingham.	C. T. Hill, and W. Allen, Esqs., Nottingham.	Employing eight women and two young persons after 8 o'clock in the evening, they having commenced work at 6.30 in the morning.	3 0 0	3 11 6	20*s.* penalty in each of three cases, remainder withdrawn on payment of costs. I asked for the full penalty in three cases, the Bench did not inflict it, but threatened a severe fine in the future.
" 21	Velvet Spinning Co. (J. V. Clements), lace clippers, Nottingham.	L. Lindley, and — Radford, Esqs., Nottingham.	(1.) Not affixing Abstract of Act in workshop.	0 5 0	0 14 0	First offences, small penalties asked for.
"	" "	" "	(2.) Employing a child full time - -	0 5 0	0 10 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Nottingham District*—cont.	£ s. d.	£ s. d.	
Feb. 23	Joseph Tomlinson, brick maker, Mansfield.	The Mayor, J. Whittaker, and W. M. Oates, Esqs., Mansfield.	Not keeping register of young persons -	0 10 0	0 11 0	I asked for modified penalties as no case has been heard under the Act in Mansfield for several years.
"	"	" "	Employing a young person without a certificate of fitness.	0 10 0	0 13 0	
"	"	" "	Not securely fencing engine and fly-wheel -	1 0 0	0 13 6	
Mar. 15	F. Wilkinson & Co. hosiery manufacturers, Chilwell, Nottingham.	A. Heymann, and George Fellows, Esqs., Shire Hall, Nottingham.	Employing five women and four young persons after seven o'clock in the evening.	0 5 0	4 15 0	Fined 5*l.*, including costs.
"	E. J. Towlson, lace manufacturer, Chilwell, Nottingham.	" "	Employing two women after seven o'clock in the evening.	1 12 0	1 8 0	Fined 3*l.*, including costs. This Bench always include the costs in the penalty.
"	Metcalf & Co., boot manufacturers, Hucknall Torkard.	A. Heymann, Esq., Capt. Holden, V. Masterman, Esq., Q.C., and B. Wild, Esq., Shire Hall, Nottingham.	(1.) Not affixing Abstract - - -	2 13 0	2 7 0	Fined 5*l.*, including costs. Firm has been established as a factory for eight years and has never attended to any of these provisions: about forty hands employed.
"	" "	"	(2.) Not keeping register of young persons -			
"	" "	" "	(3.) Employing two young persons without certificates of fitness.			

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Nottingham District*—cont.	£ s. d.	£ s. d.	
Mar. 24	Julius Goldberg, moulding manufacturer, Nottingham.	E. Pratt and W. Allen, Esqs., Guildhall, Nottingham.	(1.) Not affixing Abstract of Act	0 5 0	0 10 0	Penalties 2*l.* 15*s.*, costs 3*l.* 5*s.* Two cases withdrawn on payment of costs.
"	" "	" "	(2.) Not keeping register of young persons	2 0 0	0 10 0	
"	" "	" "	(3.) Employing three young persons without certificates of fitness.	0 10 0	2 5 0	
April 28	John Cass, cap shape maker, Nottingham.	J. W. McCraith and J. T. Forman, Esqs., Nottingham.	(1.) Not affixing Abstract of Act	0 10 0	2 8 6	
"	" "	" "	(2.) Not keeping register of young persons	0 10 0		
"	" "	" "	(3.) Employing two young persons without certificates of fitness.	1 0 0		
May 13	J. H. Manby, draper, Horncastle.	Rev. Canon Lodge and F. Otter, Esq., J.P., Horncastle.	(1.) Employing a woman overtime without affixing record of overtime in workshop.	0 3 6	0 13 0	Fined 20*s.*, including costs. First cases heard in Horncastle, so Bench thought a small penalty sufficient.
"	" "	" "	(2.) Employing a woman overtime without reporting such employment to an inspector.	0 3 6		
" 29	Mesdames Huckerby, dressmakers, Newark.	B. T. Pratt and T. Crossley, Esqs., Newark.	Employing two women after 10 o'clock at night.	0 2 0	1 13 0	The defendants, through their solicitor, pleaded that a great part of the period of employment was in the saleroom: the Magistrates accepted this as an excuse, but said they would be more severe in future.

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Nottingham District*—cont.	£ s. d.	£ s. d.	
June 6	James Fletcher, lace manufacturer, Long Eaton.	N. C. Curzon, J. Hooley, and J. Orchard, Esqs., Long Eaton.	(1.) Not keeping register of young persons -	0 5 0	2 11 8	
"	" "	" "	(2.) Employing four young persons without certificates of fitness.	1 0 0		
" 7	Davenport & Co., bookbinders, Nottingham.	J. P. Cox and W. A. Blain, Esqs., Nottingham.	(1.) Employing three women after 10 o'clock at night.	0 7 6	2 2 0	Mitigated penalties, 2*s*. 6*d*. in each case, as costs were heavy.
"	" "	" "	(2.) Not reporting overtime employment to an inspector.	0 2 6	0 9 6	
" 8	J. F. Burrows, fishing tackle maker, trading as D. Slater & Co., Newark-on-Trent.	J. Earp (Mayor), and G. Gascoigne, Esqs., Newark.	(1.) Not keeping register of young persons -	0 2 6	0 12 6	Burrows and Slater were each summoned as they formed the company. At the hearing of the case the solicitor for the defence produced a deed of assignment signed by Slater giving the business to Burrows. On this document the Magistrates dismissed the cases in respect of Slater, and fined Burrows. I paid the costs in the cases against Slater.
"	" "	" "	(2.) Employing a young person without a certificate of fitness.	0 2 6	0 13 6	
"	David Slater, fishing tackle maker, trading as D. Slater & Co., Newark-on-Trent.	" "	(1.) Not keeping register of young persons -	- -	0 4 6	
"	" "	" "	(2.) Employing a young person without a certificate of fitness.	- -	0 4 6	
" 9	Booth Bros., apron manufacturers, Nottingham.	— Bourne and J. Gascoigne, Esqs., Nottingham.	Not affixing abstract of Act - - -	0 10 0	0 10 0	Factory occupied about six months; not reported to inspector.

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Nottingham District*—cont.	£ s. d.	£ s. d.	
July 24	Balm, Hill, and Sons, lace manufacturers, Nottingham.	J. Gascoigne and W. H. Mallet, Esqs., Nottingham.	Not fencing certain mill-gearing	0 10 0	0 11 6	
Aug. 11	Edward Hutchinson, firewood manufacturer, Nottingham.	W. H. Booth and W. F. Fox, Esqs., Nottingham.	(1.) Not reporting occupation of factory	0 5 0	0 14 0	Allowed three weeks to pay fines and costs, being a poor man.
"	" "	" "	(2.) Employing a child full time	0 5 0	1 1 0	
" 26	Thos. Poucher, baker, Horncastle.	The Rev. Canon Lodge and H. M. Hawley, Esq., Horncastle.	Employing a child at 9 p.m.	-	0 6 6	Fined in costs only as the Bench accepted the child's statement that he had not been so employed before.
" 28	William Walker, lace manufacturer, Peveril Works, Nottingham.	L. Lindley and E. W. Enfield, Esqs., Nottingham.	(1.) Not keeping register of young persons	0 5 0	2 2 0	Small penalties, as costs were heavy. Two cases withdrawn on payment of costs.
"	" "	" "	(2.) Employing three young persons without certificates of fitness.	0 5 0		
Sept. 23	Clark and Son, brickmakers, Brinsley, Nottingham.	T. L. Francklin, Esq., and Capt. Holden, Nottingham.	(1.) Not affixing Abstract of Act	0 0 6	1 19 6	The Bench considered that the defendants had broken the law through ignorance; they fined them, therefore, 2*l.* 2*s.*, to include costs.
"	" "	" "	(2.) Not keeping register of young persons	0 0 6		
"	" "	" "	(3.) Not reporting fatal accident	0 1 6		
Oct. 13	J. Hopkinson, aërated water manufacturer, Alfreton.	J. H. Oakes and James Oakes, Esqs., Alfreton.	Not keeping register of young persons	0 10 0	0 12 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leicester District.*	£ s. d.	£ s. d.	
Jan. 20	Wallers Bros., tailors, Rutland Street, Leicester.	J. Stafford and R. J. Goodacre, Esqs., Police Court, Leicester.	Not keeping Abstract constantly affixed in workshop, 3rd January 1893.	- -	0 5 6	Convicted in costs only.
Feb. 3	Johnson and Goodwin, letter-press printers, 80, Rutland Street, Leicester.	J. Stafford and T. Canner, Esqs., Borough Police Court, Leicester.	Employing two young persons uncertified and not keeping register.	0 4 6	0 5 6	
„ 16	Ginns, Davenport & Co., hosiery Manufacturers, Hinckley.	W. Brookes, Esq., and the Rev. R. Titley, J.P., Police Court, Hinckley.	Not keeping registers of young persons -	0 2 6	0 12 6	
„	„ „	„ „	Not keeping Abstract affixed - - -	0 2 6	0 12 6	
„	Toon and Son, hosiery manufacturers, Earl Shilton, near Hinckley.	„ „	Employing two young persons for more than seven days without certificates of fitness.	0 5 0	1 5 0	Penalty, 2*s.* 6*d.* in each case.
„	W. H. Sturgess, boot manufacturer, Earl Shilton.	„ „	Employing a child as a young person - -	0 2 6	0 14 6	
„	„ „	„ „	Not keeping register of children and young persons.	0 2 6	0 13 0	
„	T. Shilton and Son, boot makers, Earl Shilton.	„ „	Not keeping Abstract affixed - - -	0 1 0	0 10 6	
„	„ „	„ „	Employing a child as a young person - -	0 5 0	0 14 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leicester District*—cont.	£ s. d.	£ s. d.	
Feb. 16	Orton and Ladkin, boot makers, Earl Shilton.	W. Brookes, Esq., and the Rev. R. Titley, J.P., Police Court, Hinckley.	Employing a child without obtaining certificate of attendance at school.	0 5 0	0 12 0	
"	W. and H. Howe, hosiery manufacturers, Stoney Stanton, near Hinckley.	" "	Employing four children as young persons	1 0 0	2 0 0	Penalty, 5*s.* in each case.
"	" "	" "	Not keeping Abstract affixed	0 1 0	0 10 0	
" 17	J. E. Hyde and Son, boot manufacturers, Nichols Street, Leicester.	J. Stafford, T. Canner, and R. J. Goodacre, Esqs., Borough Police Courts, Leicester.	Employing two young persons for more than seven days without obtaining certificates of fitness.	1 0 0	0 17 0	
"	" "	" "	Not keeping register of young persons	-	0 4 6	Fined in costs only.
"	E. Gonty and Son, dyers, Bath Lane, Leicester.	" "	Employing two young persons for more than seven days without obtaining certificates of fitness.	1 0 0	0 17 0	
"	" "	" "	Not keeping register of young persons	-	0 4 6	Fined in costs only.
" 17	A. J. Daws & Co., boot manufacturers, Erskine Street, Leicester.	" "	Not keeping Abstract affixed	0 10 0	0 5 6	
"	John H. Raven, needle manufacturer, Erskine Street, Leicester.	" "	Not keeping Abstract affixed	0 10 0	0 5 6	
" 22	William Hubbard, needle manufacturer, Loughborough.	Hussey Packe, Esq., and Ald. J. Griggs, J.P., Police Court, Loughborough.	Employing two young persons for more than 13 days without certificates of fitness.	0 2 0	0 18 0	Fined 10*s.* in each case, to include costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leicester District*—cont.	£ s. d.	£ s. d.	
Mar. 2	William Bird, boot manufacturer, Earl Shilton, near Hinckley.	Wm. Brooks, Esq., and the Rev. R. Titley, J.P., Police Court, Hinckley.	Employing a child as a young person - -	0 2 6	0 11 0	
"	" "	" "	Not keeping Abstract constantly affixed -	0 1 0	0 9 6	
" 10	G. Wilkinson, wholesale confectioner, Sussex Street, Leicester.	J. Stafford and J. L. Berridge, Esqs., Borough Police Court, Leicester.	Employing two young persons after 6 p.m., to wit, at 11.5 at night.	9 1 0	0 19 0	Fined 5*l.* in each case, to include costs.
"	W. Moore, boot manufacturer, North Erington, Leicester.	" "	Employing three young persons for more than seven days without certificates of fitness.	1 0 0	1 2 0	
"	" "	" "	Neglecting to keep registers of young persons	- -	0 3 6	Fined in costs only.
" 18	J. D. Broughton, hosiery manufacturer, Wigston, near Leicester.	Capt. Pochin, R.N., and Col. Bellairs, J.P., County Police Court, Leicester.	Employing a child in a morning set after one o'clock in the afternoon.	0 3 6	0 16 6	Fined 20*s.* in each case, to include costs.
"	" "	" "	Employing a child without obtaining a certificate of his attendance at school during the preceding week.	0 3 6	0 16 6	
" 24	The Belgrave Rubber Co., shoe manufacturers, Leicester.	J. Stafford and T. Canner, Esqs., J.P., Borough Police Courts, Leicester.	Not keeping a register of the young persons employed.	1 0 0	0 5 6	
"	" "	" "	Employing three young persons more than seven days without certificates of fitness.	1 10 0	1 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leicester District*—cont.	£ s. d.	£ s. d.	
Mar. 29	C. James, boot manufacturer, Metcalf Street, Leicester.	Alderman Underwood (Mayor), and Alderman Chambers, J.P., Borough Police Court, Leicester.	Employing a child as a young person - -	0 10 0	0 9 0	
Apr. 1	F. Carter, letterpress printer, Irongate, Derby.	C. Bowring, and W. Boam, Esqs., J.P., Derby Police Court.	Employing two young persons more than seven days without certificates of fitness.	0 5 0	1 0 0	
"	J. & H. Bloor, trimming manufacturers, New Normanton, Derby.	" "	Employing one young person without a certificate of fitness for more than seven days.	0 2 6	0 10 0	
"	"	" "	Neglecting to keep register of the young persons employed.	0 2 6	0 7 6	
" 21	G. Paul, aërated water manufacturer, Grosvenor Street, Leicester.	T. Canner, A. Baines, and W. Inskip, Esqs., J.P., Borough Police Court, Leicester.	Employing a young person on Good Friday -	- -	0 9 0	Fined in costs only.
"	Allen & Co., pork pie manufacturers, Cobden Street, Leicester.	" "	Employing a young person on Good Friday -	- -	0 9 0	Fined in costs only.
"	J. W. Pendleton, bootmaker, Humberstone Road, Leicester.	" "	Neglecting to fence part of mill gearing, to wit, shaft under sewing-machine bench.	1 0 0	0 5 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.*	REMARKS.
1893.			*In the Leicester District*—cont.	£ s. d.	£ s. d.	
May 16	T. Needham, engineer, Nuns Street, Derby.	J. Baily and H. Boam, Esqs., J.Ps., Police Courts, Derby.	Failing to keep registers of the young persons employed.	0 5 0	0 7 6	
"	" "	" "	Employing two young persons more than seven days without certificates of fitness.	0 10 0	0 18 0	
"	" "	" "	Failing to keep Abstract affixed	0 5 0	0 6 6	
"	Stephen Wright, bookbinder, Sadlerfate, Derby.	" "	Failing to keep registers of the young persons employed.	0 5 0	0 8 6	
" 24	G. Tucker and Son, brick manufacturers, Park Lane, Loughborough.	Rev. Richard Burton, Geo. Adcock, and J. Griggs, Esqs., Loughborough Police Court.	Employing four young persons for more than seven days without a certificate of fitness from the certifying surgeon.	0 6 0	2 14 0	A penalty of 15*s.* in each case, from which the costs were to be deducted.
" 31	J. Curry & Co., boot manufacturers, Welford Road Leicester.	J. Underman, and J. L. Berridge, Esqs., Leicester Police Court.	Employing three young persons more than seven days without certificates of fitness from the certifying surgeon.	0 11 0	1 3 0	A penalty of 20*s.* to include costs in first case, and costs only in the other two.
June 3	James Burbage, boot manufacturer, Cosby, Leicestershire.	Capt. Pochin, and E. R. Norman, Esq., Leicester County Police Court.	Employing a child in both a morning and afternoon set on May 8th, 1893.	0 5 0	1 5 0	
" 20	Tebbutt & Co., pie manufacturers, Sherrard Street, Melton Mowbray.	C. W. Chaplin, and E. R. Norman, Esqs., Melton Mowbray Police Court.	Employing two young persons under 16 years of age more than seven days without a certificate of fitness.	- -	1 6 0	The Magistrates taking into consideration the amount of the costs, convicted in costs only.
"	T. H. Towne, letterpress printer, Market Place, Melton Mowbray.	" "	Employing a child neither on the system of alternate day sets, nor on the system of morning and afternoon sets.	- -	0 13 0	
" 21	Joshua Lawrence, bookbinder, Low Free Lane, Leicester.	T. D. Paul, Esq. (Mayor), Borough Police Court, Leicester.	Employing a child and a young person for more than seven days without surgical certificate.	0 10 0	0 18 0	1*l.*, including costs in one case; costs in the other.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Leicester District*—cont.	£ s. d.	£ s. d.	
July 8	The Midland Constitutional Newspaper Co.	J. Bailey, and H. Boam, Esqs., Borough Police Court, Derby.	Employing a young person after 2 p.m. on Saturday, 17th June.	0 1 0	0 10 0	
"	" "	" "	Employing a young person for more than seven days without a surgical certificate.	0 1 0	0 10 0	
" 17	Sarah Jane Pretty, dress-maker, 28, Regent Street, Leicester.	The Mayor and O. Tabberer, Esq., Borough Police Court, Leicester.	Employing two females after 4 p.m. on Saturday.	0 2 0	0 18 0	Fined 10*s*. in each case, to include costs.
"	G. A. Wainwright, electrical engineer, Welford Road, Leicester.	" "	Employing a young person for more than seven days without a surgical certificate.	0 11 0	0 9 0	Fined 20*s*., to include costs.
Aug. 9	The Leicester Cigar Manufacturing Co., Limited, tobacco manufacturers, Granby Street.	The Mayor, B. C. Wates, Esq., and Dr. Clifton, Leicester.	Employing a young person for more than seven days without a surgical certificate.	0 0 6	0 9 6	Fined 10*s*., to include costs, or seven days.
"	" "	" "	Employing a child both before noon and after noon on the same day.	0 10 0	0 10 0	Fined 1*l*., to include costs, or 14 days.
Sept. 8	J. Thacker, sand-paper manufacturer, 73, Gladstone Street.	J. Stafford and W. Kempson, Esqs., Town Hall, Leicester.	Failing to give notice of occupation of factory	0 14 6	0 5 6	Fined 20*s*., to include costs, or 14 days.
"	J. W. Urquhart, machinist, Cedar Road.	" "	Failing to give notice of occupation of factory	0 14 6	0 5 6	
Oct. 25	J. Clemson, boot manufacturer, Burton Road, Derby.	The Mayor and J. Newbold, Esq., Borough Police Court, Derby.	Employing three young persons for more than seven days without surgical certificates.	1 10 0	1 11 6	Fined 10*s*. in each of these cases and costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.*	REMARKS.
1892.			*In the Stafford District.*	£ s. d.	£ s. d.	
Nov. 9	James Broadhurst, earthenware manufacturer, Frederick Street, Fenton.	H. C. Greenwood, Esq. (Stipendiary), Fenton.	Employing four women after 6 p.m., viz., at 7.50 p.m.	4 0 0	2 16 0	
23	S. Wilton, builder, Shaw Street, Newcastle, Staffordshire.	R. Mosley and T. Brougham, Esqs., Newcastle, Staffordshire.	Failing to affix Abstract of the Act in his factory.	- -	0 4 6	These cases were taken as a public caution, and withdrawn on defendant paying costs.
„	Geo. Stevenson, bookbinder, Penkhull Street, Newcastle, Staffordshire.	„ „	Failing to affix Abstract of the Act in his factory.	- -	0 4 6	
„ 28	A. Hyman, tailor, 5, Cannon Street, Hanley.	H. C. Greenwood, Esq. (Stipendiary), Hanley.	Failing to give notice of occupation of workshop.	- -	0 9 6	Costs only asked for; taken as a caution.
Dec. 19	Wm. Sanders, tailor, Lamb Street, Hanley.	H. C. Greenwood, Esq. (Stipendiary), and Dr. Spanton, Hanley.	Failing to affix Abstract in his workroom	0 5 0	0 9 6	
„ 20	Bennion Brothers, earthenware decorators, Dale Street, Burslem.	H. C. Greenwood, Esq. (Stipendiary), Burslem.	Employing a young person after 7 p.m., viz., 8.30 p.m.	1 0 0	0 14 6	
1893.						
Jan. 16	Atkinson Brothers, printers, Park Street, Hanley.	J. Ridgway and J. W. Bishop, Esqs., Hanley.	Failing to enter in prescribed register, and report before 8 p.m., the particulars respecting the employment of a young person overtime.	0 10 0	0 14 6	
„ 25	Wm. Jones, china manufacturer, Market Street, Longton.	J. F. Wileman and W. A. Adderley, Esqs., Longton.	Employing one young person and two children without medical certificates.	3 0 0	2 6 6	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stafford District*—cont.	£ s. d.	£ s. d.	
Jan. 25	Wm. Jones, china manufacturer, Market Street, Longton.	J. F. Wileman and W. A. Adderley, Esqs., Longton.	Employing a child as a full timer for 2½ days	- -	0 15 6	Defendant to pay costs.
"	The Globe Tile Co., tile decorators, Warren Place, Longton.	" "	Failing to keep the Factory Abstract affixed	- -	0 9 6	Withdrawn at the request of the Bench, defendant paying costs.
" 27	Thos. Brayford, confectioner, High Street, Stoke-on-Trent.	Wm. Kirkham and Geo. Leason, Esqs., Stoke-on-Trent.	Employing a young person after 9 p.m.	0 2 6	0 14 6	
"	Rd. Cotton, confectioner, Liverpool Road, Stoke-on-Trent.	" "	Employing a young person after 9 p.m.	0 2 0	0 14 6	
"	Thos. Hall, confectioner, Shelton New Road, Stoke-on-Trent.	" "	Employing two young persons after 9 p.m.	0 2 6	1 9 0	The Bench considered a penalty in one case would be a sufficient caution.
Feb. 28	A. Bailey, timber merchant, Stone.	————, Stone	Employing a young person after 7 p.m.	- -	0 9 6	Case dismissed. Court opens at 10 a.m., and owing to train being 10 minutes late I did not arrive until 10.15, and found Court closed, and that my case had been dismissed.
Mar, 3	Ambrose Roberts, engineer, Wharf Street, Stoke-on-Trent.	Harold Wright (Stipendiary) and Geo. Leason, Esqs., Stoke-on-Trent.	Failing to give notice of occupation of factory	0 10 0	0 9 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stafford District*—cont.	£ s. d.	£ s. d.	
Mar. 7	Benj. Robinson, earthenware manufacturer, Girder Bridge Works, Church Gresley.	J. L. Prinsep, J. L. P. Barber, and J. Beard, Esqs., Swadlincote.	Employing three young persons without certificates of fitness.	1 0 0	1 6 0	
"	Edward Wragg, ironfounder and machinist, Church Gresley.	" "	Employing three young persons without certificates of fitness.	- -	0 9 6	Withdrawn at the request of the Bench, defendant paying costs.
" 13	E. and G. Knapper, fustian cutters, Congleton.	S. Maskery, A. J. Solly, and D. Bradwell, Esqs., Congleton.	Employing a young person after 7 p.m. - -	0 8 0	0 12 0	
"	Hy. Mitchell, fustian cutter, Rood Hill, Congleton.	" "	Employing a young person during part of the time allowed for meals.	0 8 0	0 12 0	
"	Samuel Hewitt, fustian cutter, 16, Henrietta Street, Congleton.	" "	Allowing his daughter, a young person, to be employed during part of the time allowed for meals in the factory of Hy. Mitchell, Congleton.	0 5 0	0 12 0	
"	Hy. Barton & Co., towel manufacturers, Hatter Street, Congleton.	" "	Employing a young person three months without certificate of fitness.	- -	0 7 0	Fined in costs only. The defendant said he had sent the young person to the doctors, who had sent her back, and promised to call, but had not done so. The Bench thought if defendant paid costs it would be sufficient caution.
"	" "	" "	Employing a young person three months without certificate of fitness.	- -	0 7 0	Fined in costs only.

RETURN OF PROSECUTIONS—*continued.*

Date	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stafford District*—cont.	£ s. d.	£ s. d.	
Mar. 20	John Hall, baker, Broad Street, Hanley.	Harold Wright, Esq., Stipendiary, and Dr. Spanton, Hanley.	Employing a young person after 2 p.m. on Saturday, 4th March.	- -	0 14 6	Fined the costs. Defendant pleaded that he thought the Shop Hours Act applied to the boy.
"	Bennion Bros., earthenware, manufacturers, Marsh Street, Hanley.	" "	Failing to give notice of occupation of a factory.	- -	0 10 6	Fined the costs.
" 21	Kent Bros., engineers, Cobridge, Staffs.	H. Wright, Stipendiary, and Thos. Hulme, Esqs., Burslem.	Failing to keep Factory Abstract affixed -	- -	0 9 6	
" 28	N. Banks and Son, earthenware manufacturers, Church Gresley.	J. L. Prinsepp, Jno. Beard, and J. S. L. Barber, Esqs., Swadlincote.	Employing two young persons without certificates of fitness from the surgeon.	- -	1 4 6	To pay costs. In these cases the Bench said they were inclined to deal leniently, and hoped that the prosecutions would act as a general caution to the whole district, for in the future they should deal severely with such cases.
"	Executors of W. Cotterill, earthenware manufacturers, Woodville.	" "	Employing a young person without certificate of fitness from the surgeon.	- -	0 13 6	
"	Aaron Jones, earthenware manufacturers, Church Gresley.	" "	Employing a young person without certificate of fitness from the surgeon.	- -	0 13 6	
"	Fredk. Heath, earthenware manufacturer, Woodville.	" "	Employing two young persons without certificates of fitness from the surgeon.	- -	1 4 6	
"	Wm. Mason, earthenware manufacturer, Church Gresley.	" "	Employing a young person without certificate of fitness from the surgeon.	- -	0 14 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stafford District*—cont.	£ s. d.	£ s. d.	
Mar. 28	Wm. Mason, earthenware manufacturer, Church Gresley.	J. L. Prinsepp, Jno. Beard, and J. S. L. Barber, Esqs., Swadlincote.	Failing to fence a steam engine and flywheel connected therewith.	1 0 0	0 7 0	
"	Chas. W. Outram, earthenware manufacturer, Woodville.	" "	Failing to limewash his factory within 14 months of the date of the last limewashing.	1 0 0	0 10 6	
" 29	Frederic Augustus Adams, no occupation, Lord Street, Basford, Stoke-on-Trent.	Harold Wright, Stipendiary, and W. A. Adderley, Esqs., Fenton.	Falsely pretending to be an Inspector of Factories, thereby gaining unauthorised admittance to St. Mary's Works, Longton, 17th March 1893.	5 0 0	2 0 6	The Stipendiary said that as the defendant had evidently been under the influence of drink he would take a lenient view of the case.
April 12	Geo. Mason, cabinet maker, Ironmarket, Newcastle, Staffordshire.	R. Mosley and C. H. Hardiman, Esqs., Newcastle, Staffordshire.	Failing to keep Abstract affixed - -	0 2 6	0 9 0	
"	H. Goodall and Sons, High Street, cabinet makers, Newcastle, Staffordshire.	" "	Failing to keep Abstract affixed - - -	- -	0 4 6	To pay the costs.
" 15	Reservoir Pipe Co., drain pipe manufacturers, Overseal.	Hon. P. Hastings, Colonel Partridge, and Canon Beaumont, Ashby-de-la-Zouch.	Employing three young persons without certificates of fitness.	0 1 0	2 0 0	As the defendants had made arrangements for carrying out the regulations strictly in future, and expressed regret, I asked for a nominal penalty. Defendants had to pay costs in the second and third charge.
" 18	Mrs. R. Ward, aërated water manufacturer, Church Gresley.	Colonel Milligan and J. Beard, Esq. Swadlincote.	Failing to keep Abstract affixed in factory -	0 1 0	0 10 6	
"	Moore and Son, brick makers, Overseal.	" "	Failing to report accident to inspector and surgeon.	0 5 6	0 9 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stafford District*—cont.	£ s. d.	£ s. d.	
April 19	N. Bierman, tailor, 7, Wood Street, Longton.	H. Wright, Stipendiary, J. F. Wileman, and A. Edwards. Esqs., Longton.	Failing to give notice of occupation of workshop.	- -	0 8 0	To pay the costs.
" 28	Jos. Elliott, and Son, wheelwright, &c., Byrkley Street, Burton-on-Trent.	A. J. Coxon (Mayor), and A. W. Worthington, Esqs., Burton-on-Trent.	Employing a young person without certificate of fitness.	0 1 0	0 9 6	
"	John Radford, baker, Moor Street, Burton-on-Trent.	" "	Employing a young person of 16, both before 6 a.m. and after 6 p.m. on the same day.	0 1 0	0 13 0	
" 29	Ellis, Partridge, & Co., brick manufacturers, Woodville.	Canon Beaumont and Colonel Partridge, Ashby-de-la-Zouch.	Employing a child of 12 as a full timer -	0 1 0	0 18 0	
May 8	J. Brittain and Son, engineers, Chesterton.	M. D. Hollins and A. D. Stocker, Esqs., Newcastle, Staffordshire.	Employing a young person without certificate of fitness.	0 5 0	0 13 6	
" 18	Alfred Meakin, earthenware manufacturer, Highgate Pottery, Tunstall.	Harold Wright, Esq., Stipendiary, Tunstall.	Employing a child without certificate of fitness.	1 0 0	0 14 6	This case was adjourned from the 11th to enable the firm to summons one of the workmen, whom they charged as having employed the child contrary to their orders. On examining the boy he stated that he had worked there seven months. The Stipendiary decided that the firm had not shown "due diligence," and declined to convict the workman.
"	" "	" "	Employing the above child without a certificate of attendance at school.	1 0 0	0 9 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing,	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stafford District*—cont.	£ s. d.	£ s. d.	
May 18	S. Fitchford, ovenman, Booth Street, Tunstall.	Harold Wright, Esq., Stipendiary, Tunstall	Being the father of the child referred to in foregoing case, did knowingly allow him to be employed contrary to the provisions of the Act.	0 5 0	0 8 0	
„ 22	Metallic Tile Co., brick and tile makers, Chesterton, Staffordshire.	M. D. Hollins, S. R. Edge, and Jas. Bull, Esqs., Newcastle-under Lyme.	Employing a girl of 14 to carry bricks	1 0 0	0 10 0	
„	Executors of the late Ed. Thorneycroft, brick and tile makers, Bradwell Hall, Chesterton, Staffordshire.	„ „	Employing a girl of 14 to carry bricks	0 10 0	0 16 0	
„	New Rose Vale Brick and Tile Co., brick and tile makers, Chesterton, Staffordshire.	„ „	Employing a child of 12 years to carry bricks	- -	0 5 6	As the child stated in court that she had only been at work half-an-hour, the Bench did not think the firm were to blame, and dismissed the case. I had to pay the costs.
„	North Staffordshire Brick and Tile Company, brick and tile makers, Chesterton, Staffordshire.	„ „	Employing a girl of 14 years in a brick and tile works.	- -	- -	Adjourned to June 5. The Bench at the request of defendants consented to an adjournment in order that case might be fully prepared: defendants contending that as they also made "ornamental" tiles, they were entitled to employ girls under 16.
June 5	„ „	„ „	Employing a girl, aged 14 years, in the making of bricks.	1 0 0	0 19 0	This case was adjourned from previous court-day.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stafford District*—cont.	£ s. d.	£ s. d.	
June 6	Jabez Fisher, wheelwright, Hope Street, Hanley.	Harold Wright, Stipendiary, and W. Boulton, Esqs., Burslem.	Employing a young person after 7 p.m.	0 5 0	0 11 0	
" 7	Plant Bros., Crown Pottery, earthenware manufacturers, Burslem.	Harold Wright, Stipendiary, and W. A. Adderley, Esqs., Fenton.	Not keeping factory in a cleanly state	1 0 0	0 9 0	
" 21	Jas. Adams & Co., brick manufacturers, Fenton.	" "	Employing a young person without a certificate of fitness.	1 0 0	1 0 6	This case had been twice adjourned; the defendants not appearing in person.
"	" "	" "	Employing a young person during the dinner hour.	0 5 0	0 10 0	Defendant said he went frequently into shop during meal times, and the Bench thought a nominal fine would suffice in this case.
" 29	Plant, Lewis, & Co., earthenware manufacturers, Davenport Street, Burslem.	Harold Wright, Esq., Stipendiary, Tunstall.	Employing a women during meal time	0 5 0	0 12 6	
July 6	Cumberlidge and Humphreys, earthenware manufacturers, Pinnox Street, Tunstall.	" "	Employing a child as half-timer who had not passed the standard required by the School Board Bye-Laws.	1 0 0	0 13 0	
" 25	Edmund Leigh, engineer, North Road, Cobridge.	Harold Wright, Stipendiary, and J. Maddocks, Esqs., Burslem.	Employing a young person at 9.20 p.m.	-	0 8 0	Dismissed. The defendant said he allowed this youth to come there to make tools for his own private use; although, when I visited, he was doing a bit of work for defendant at the moment. The Stipendiary Magistrate said the evidence was hardly strong enough, and would give defendant benefit of the doubt.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Stafford District*—cont.	£ s. d.	£ s. d.	
July 28	Geo. Henson, mineral water manufacturer, Parker Street, Burton-on-Trent.	E. Wright and W. H. Worthington, Esqs., Burton-on-Trent.	Employing two young persons at 5 p.m. on Saturday, 8th July.	1 0 0	1 11 0	
"	" "	" "	Employing a young person after 6 p.m., viz., 7.50 p.m., 10th July.	0 10 0	0 15 6	
Aug. 30	G. H. Plant, dyer, Ball Haye Road, Leek.	W. S. Brough and E. A. Worthington, Esqs., Leek.	Employing a young person without certificate of fitness.	0 2 6	0 14 0	
"	M. Swindells, bobbin turner, Portland Street, Leek.	" "	Employing a child without certificate of fitness.	0 2 6	0 14 0	
1892.			*In the Walsall District.*			
Nov. 4	Edgar Longmore in the employ of Messrs. S. Russel & Co., iron-founders, &c., Freer Street, Walsall.	J. Newman, G. H. Philllips, and W. E. Blythe, Esqs., Borough Police Court, Walsall.	Employing a male young person in the foundry after 7 p.m., to wit, at 9.15 p.m., on Friday, 21st October 1892.	0 2 6	0 3 6	The occupiers, Messrs. S. Russell & Co., were cited as the defendants by the Inspector. At the hearing the firm availed themselves of Sections 86 and 87, and the actual employer of the young person became defendant. The Magistrates remitted all expenses, with the exception of the sum of 3*s.* 6*d.* paid for a birth certificate.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Walsall District*—cont.	£ s. d.	£ s. d.	
Nov. 7	Ann Robinson, dressmaker, &c., 8, Lichfield Street, Rugeley.	Sir Chas. Forster (Chairman), Sir Chas. Wolseley, — Chetwyn, — Bonney, — Anderson, and — Carrington-Smith, Esqs., Town Hall, Rugeley.	Employing four females after 4 p.m., to wit, at 5.25 p.m., on Saturday, 8th October 1892.	0 2 6	0 17 6	Only one case was taken; in this the fine and expenses were inflicted. Three other cases were dismissed, though the defendant, through her solicitor, pleaded guilty to the contravention.
Dec. 18	Alice Cottam, dressmaker, 332, Stoney Lane, Smethwick.	J. H. Pearson (Chairman), J. I. Parkes, and A. H. Griffiths, Esqs., Police Court, Smethwick.	(1.) Failing to keep a copy of the Abstract affixed in the workroom.	- -	0 9 0	This being a first offence the Magistrates convicted in costs only.
"	" "	" "	(2.) Failing to enter in the prescribed register, and report to the inspector the prescribed particulars respecting the employment of certain females after 8 o'clock in the evening of 26th November 1892.	- -	0 9 0	
" 21	Matthew, Harvey & Co., harness furniture manufacturers, &c., Glebeland Works, Walsall.	Benjn. Beebee (Chairman), Jas. Lincrop, and Sidney B. Wheway, Esqs., Guildhall, Walsall.	Neglecting to fence mill-gearing, viz., a horizontal shaft, whereby Charlotte Wheeler suffered bodily injury on 22nd November 1892.	5 0 0	0 11 6	This complaint was laid under Section 82, and the Secretary of State approved of the penalty being paid to the injured person.
1893.						
Jan. 2	Frank Smith & Co., curriers, &c., Frederick Street, Walsall.	J. Brewer (Chairman), and J. Moseley, Esqs., Guildhall, Walsall.	(1.) Failing to affix an Abstract copy of the Acts in the works.	1 0 0	0 10 6	
"	" "	" "	(2.) Employing a male young person without having obtained a certificate of fitness for such employment from the certifying surgeon of the district.	1 0 0	0 11 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Walsall District*—cont.	£ s. d.	£ s. d.	
May 31	Charles Wincer & Co., harness manufacturers, Brace Street, Walsall.	J. Thorpe, J. D. Clark, and Jas. Slater, Esqs., Guildhall, Walsall.	(1.) Employing three young persons under the age of 16 years without having obtained certificates of fitness for employment.	1 10 0	1 9 6	
"	" "	" "	(2.) Failing to keep the register of young persons in the prescribed form.	0 5 0	0 11 6	
June 21	Stanley Bros., harness furniture manufacturers, Eldon Street, Walsall.	J. Thorpe (Chairman), — Lindop, — Slater, — Clark, — Jupp, and — Dean, Esqs., Guildhall, Walsall.	Employing a male young person in their foundry at 8.10 p.m. on Friday, 2nd June 1893.	0 10 0	0 10 6	
July 7	Alfred Lynex, builder, &c., Vicarage Place, Walsall.	J. Newman (Chairman), J. Scott, and W. E. Blyth, Esqs., Guildhall, Walsall.	Neglecting to send notice of an accident to the inspector of factories and the certifying surgeon of the district.	0 10 0	0 10 6	
"	James Frakes, padlock manufacturers, Sprent Lane, Walsall.	" "	Neglecting to send notice of an accident to the inspector of factories and the certifying surgeon of the district.	0 10 0	0 10 6	
Aug. 22	A. H. Dawson & Co., Ship's tackle manufacturers, 71, Lower High Street, Wednesbury.	N. C. A. Neville, Esq., Stipendiary, Police Court, Wednesbury.	Employing a male young person under the age of 16 years, without having obtained a certificate of fitness for employment, from the certifying surgeon for the district.	2 0 0	0 11 6	
1892.			*In the Wolverhampton District.*			
Nov. 7	Thos. Pedley, iron founder, Willenhall.	J. C. Tildesley and Josiah Tildesley, Esqs., Willenhall.	Employing two young persons without certificates of fitness.	0 10 0	1 3 0	One case withdrawn on payment of costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
Nov. 8	Salter and Rowlands, letter-press printers, Welshpool.	D. P. Owen, Esq., Colonel Twyford, and others, Welshpool.	Employing a child as a young person - -	0 1 0	0 5 0	
„	Rees James, saddler, Welshpool.	„ „	Employing a young person after 2 p.m. on Saturday.	0 1 0	0 5 0	
„ 21	Edwin Davies & Co., fire-iron makers, Minories, Dudley.	J. Russell, Esq., and Dr. Higgs, Dudley.	Employing a young person after 7 p.m. on 28th October 1892.	- -	0 12 0	Withdrawn on payment of costs.
„	Absalom Harper, ashpan maker, New Mill Street, Dudley.	„ „	Using a special exception without giving notice, 28th October 1892.	0 5 0	0 13 6	
„ 24	William Habberley, roller at Roberts and Cooper's, Brittell Lane Iron Mill.	N. C. A. Neville, Esq., Stipendiary, Brierley Hill.	Failing to keep certain couplings, being dangerous machinery, securely fenced, 27th October 1892.	0 5 0	0 12 6	
„	Smart Bros., glass makers, Round Oak.	„ „	Employing a child in a glasshouse on or about 24th October 1892.	1 0 0	0 15 6	
„ 29	The South Staffordshire Blue Brick Co., Limited, brick makers, Cakemore.	J. S. Smith and G. Reay, Esqs., Halesowen.	Failing to obtain certificates of fitness for young persons; two cases.	- -	1 10 0	Fined the costs.
„	„ „	„ „	Failing to register the necessary particulars for young persons; two cases.	- -	1 10 0	(Fined the costs.)
Dec. 7	James Gadd and Sons, bolt makers, 48, High Street, Blackheath.	N. Bassano and J. W. Holcraft, Esqs., Old Hill.	Employing a young person without a certificate of fitness.	3 0 0	0 13 6	
„ 12	Thomas Weston, keymaker, Willenhall.	Thos Beach and J. Tildesley, Esqs., Willenhall.	Employing a child after 7 p.m. - - -	0 5 0	0 11 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
Dec. 15	Wm. Summerhill, corn crusher, Dudley.	E. Garrett and W. Smith, Esqs., Dudley.	Failing to specify the hours of work and meals on the Abstract.	0 1 0	0 13 6	
„ 16	Thomas Jones, junr., brick-maker, Dunstan Lane, Wolverhampton.	N. C. A. Neville, Esq., Stipendiary, Wolverhampton.	Failing to affix the prescribed Abstract	-	0 10 6	Fined the costs.
„ 17	W. B. Walker, letterpress printer, Shrewsbury.	— Evans, — Cock, — Corbett, Esqs., Shrewsbury.	Failing to limewash his factory within 14 months.	0 13 6	0 6 6	Justices ordered it to be done within three weeks.
„	J. Griffiths, tinsmith, Shrewsbury.	„ „	Failing to affix the prescribed Abstract	-	0 9 0	I only asked for costs as the man is only a working man.
„ 30	John Harrison, boot maker, Halesowen Road, Netherton.	G. Thompson and D. Howat, Esqs., Dudley.	Employing one young person without entering the necessary particulars in the prescribed register.	0 1 0	0 12 6	
„	„ „	„ „	Employing one young person without obtaining the certificate of fitness from the certifying surgeon of the district.	0 1 0	0 12 6	
1893.						
Jan. 3	J. Jackson & Co., coach builders, Tower Street, Dudley.	J. Dunn and E. Grainger, Esqs., Dudley.	Not affixing copy of Abstract.	0 10 0	0 8 0	
„ 6	Rowland Millington, builder, Oakengates.	J. T. Brook and D. Jones, Esqs., Shifnal.	Failing to affix the Abstract	2 0 0	0 6 6	
„	„ „	„ „	Failing to report an accident	1 0 0	0 12 0	
„ 9	Wm. Ball, key maker, Willenhall.	Henry Vaughan and J. Tildesley, Esqs., Willenhall.	Failing to affix the Abstract	0 5 0	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
Jan. 18	The New British Iron Co., Limited, brick makers, Cradley Heath.	Ben. Hingley, and J. B. Hill, Esqs., Old Hill.	Employing a woman during the dinner hour -	0 10 0	0 17 6	
„ 24	Joseph Rudge, spike maker, Islington, Halesowen, near Birmingham.	H. Lea Smith and W. Bassano, Esqs., Halesowen.	Employing one young person after 7 p.m. -	0 10 0	0 14 0	
„	Benjamin White, milliner, Peckingham Street, Halesowen.	„ „	Failing to affix the prescribed Abstract -	- -	0 [illegible] 0	Fined 5*s.*, costs included. Mr. Lea Smith said he considered it straining the law to prosecute in this case.
„	Sarah Ann White, dressmaker, Peckingham Street, Halesowen.	„ „	Availing herself of a special exception without giving notice.	- -	0 19 6	Dismissed. The defendant pleaded guilty, but the Bench dismissed the case saying the women were not working overtime, although they were found at work at 8.15 p.m., and when I proceeded to show that this must be overtime, they refused to hear me.
Feb. 1	John Dalton, builder, Darby Street, Blackheath.	W. Bassano and B. Hill, Esqs., Old Hill.	Employing one young person without certificate of fitness from certifying surgeon of district.	0 10 0	0 14 6	
„ 3	Oakley Bros., iron polishers, New Mill Street, Dudley.	Septimus Baggot and J. R. Tilley, Esqs., Dudley.	Failing to produce the prescribed register to an inspector.	0 10 0	0 8 0	
„ 6	Gabriel S. Squire, lock maker, Willenhall.	J. Tildesley, Esq., and Dr. Hartill, Willenhall.	Employing a child as a young person - -	1 0 0	0 13 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
Feb. 21	Wm. Orme Foster, Madeley Court Blast Furnace.	W. Y. Owen, Esq., and Major Anstice, Broseley, Salop.	Employing a child as a young person - -	1 0 0	0 15 6	
"	" "	" "	Employing the above child and a young person without certificates of fitness.	2 0 0	1 9 0	
" 22	The Bridge and Careton Quarry Co., quarry owners, Grindshill.	John Sandford and R. Eyton, Esqs., Shrewsbury.	Not affixing a copy of the prescribed Abstract of the Acts.	0 10 0	0 8 6	
Mar. 7	Hodgetts and Cooper, mineral water makers and brewers, Halesowen.	H. Lea Smith and G. Reay, Esqs., Halesowen.	Failing to affix a copy of the prescribed Abstract of the Acts.	0 1 0	0 9 0	
"	" "	" "	Employing a child without certificate of fitness from certifying surgeon.	0 1 0	0 16 0	
"	" "	" "	Employing a child as a young person - -	0 1 0	0 8 0	
" 8	Edward Bates, brassfounder, Wolverhampton.	N. C. A. Neville, Esq., Stipendiary, Wolverhampton.	Failing to keep mill gearing securely fenced -	1 0 0	0 9 0	
" 20	J. Wilkinson and Sons, anvil makers, Dudley.	W. E. Walker and E. Bagott, Esqs., Dudley.	Allowing a young person to remain in a room during a meal hour when a manufacturing process was being carried on.	0 2 6	0 12 6	
" 23	Butter and Son, tailors, Wem, Salop.	Captain Dickin and others, Wem.	Employing a child as a young person - -	0 6 0	0 14 0	
"	Hy. Kynaston, baker, Wem, Salop.	Captain Dickin, Wem - -	Failing to specify the period of employment and time allowed for meals on the prescribed notice.	0 6 0	0 11 0	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
Mar. 24	J. Williams and Son, saw mill, Oswestry.	E. Shaw and C. G. Bailey, Esqs., Oswestry.	Failing to affix the prescribed Abstract -	0 1 0	0 7 6	
"	F. E. Birch, picture frame maker, Oswestry.	" "	Failing to affix the prescribed Abstract -	0 1 0	0 7 6	
"	John Jenks, mineral water maker, Oswestry.	" "	Failing to affix the prescribed Abstract -	0 1 0	0 7 6	
" 30	John G. Harrison, brewer, Alkington Street, Whitchurch.	R. P. Ethelston and C. T. Dugdale, Esqs., Whitchurch.	Employing one young person without a certificate of fitness from certifying surgeon of the district.	- -	0 9 0	Fined the costs only. The defendant said he did not think the bottling room a portion of the factory.
April 5	Rowland R. Turner, smith, 223, Halesowen Road, Old Hill.	Wm. Bassano and Benj. Hingley, Esqs., Old Hill.	Employing one young person after 6 o'clock in the evening.	1 0 0	0 15 0	
" 6	John Edward Paskin, brewer, High Street, Quarry Bank.	N. C. A. Neville, Esq., Stipendiary, Brierley Hill.	Failing to affix a copy of the prescribed Abstract of the Acts.	0 10 0	0 9 0	
"	Arthur Webb, joiner, High Street, Quarry Bank.	" "	Failing to affix a copy of the prescribed Abstract of the Acts.	0 5 0	0 9 0	
April 7	H. Hipkiss & Co., forgings, Lodge Forge, Cradley.	C. B. Cochrane and Walter Showell, Esqs., Stourbridge.	Neglecting to maintain the fencing of a steam-engine in an efficient state, the engine being in motion for a manufacturing process.	1 0 0	0 11 6	
"	Thomas Willits, chain maker, New Street, Cradley.	" "	Employing one young person before seven o'clock in the morning, the hours specified on Abstract being 7 a.m. to 7 p.m.	1 10 0	0 14 6	
" 8	R. D. Bromley, corn crusher, Shrewsbury.	U. Crump and T. P. Deakin, Esqs., Shrewsbury.	Failing to affix the prescribed Abstract of the Act in his factory.	- -	0 6 6	Fined the costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
April 8	G. W. Newton, smith, Shrewsbury.	U. Crump and T. P. Deakin, Esqs., Shrewsbury.	Employing a young person after 2 p.m. on Saturday.	0 13 0	0 7 0	
„ 27	Boulton and Mills, glass manufacturers, Wordsley.	N. C. A. Neville, Esq. Stipendiary, Brierley Hill.	Employing one young person without certificate of fitness from the certifying surgeon of the district.	2 0 0	} 0 19 0	
„	„ „	„ „	Employing one young person without entering the necessary particulars in the prescribed register.	1 0 0		
„ 28	Price and Son, builders, Minsterley.	J. Sandford, Esq., and Rev. E. Lee, Cruckton.	Employing two young persons after 2 p.m. on Saturday.	1 15 0	1 5 0	
May 4	The London and North-Western and Great Western Railways Joint Co., saw mill, Shrewsbury.	Thos. Southam and B. Crump, Esqs., Shrewsbury.	Failing to report an accident to one William Stockdale.	0 5 6	0 14 6	
„ 5	Bradley and Co., iron mill, Amblecote, Stourbridge.	C. Cochrane, Esq., and Dr. Freer, Stourbridge.	Employing two young persons without certificates of fitness from the certifying surgeon of the district.	2 0 0	1 6 0	
17	Hannah Maria Hale, dressmaker, 107, Pedmore Road, Woodside, Dudley.	G. Baggott and E. Granger, Esqs., Dudley.	Failing to affix the prescribed Abstract of the Acts.	0 10 0	0 8 0	
„	Alice Wood, 74, High Street, Woodside, Dudley.	„ „	Failing to affix the prescribed Abstract of the Acts.	0 2 6	0 15 0	
„ 19	The Sheet Iron Workers Industrial Society, Limited, iron plate workers, Lye.	J. Amplett and W. Showell, Esqs., Stourbridge.	Employing one young person without entering the necessary particulars in the prescribed register.	1 0 0	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
May 19	The Sheet Iron Workers Industrial Society, Limited, iron plate workers, Lye.	J. Amplett and W. Showell, Esqs., Stourbridge.	Employing one young person without a certificate of fitness from the certifying surgeon of the district.	1 0 0	0 10 6	
„ 24	Aston and Grist, dressmakers, Beauty Bank, Old Hill.	Benj. Hingley and G. Hill, Esqs., Old Hill.	Failing to affix the prescribed Abstract of the Acts.	- -	[illegible] 8 6	Fined the costs.
„ 26	"Salopian and Montgomeryshire Post," letterpress printers, Oswestry.	E. Shaw and R. Blaike, Esqs., Oswestry.	Employing a young person without registering his name, &c.	- -	0 12 0	Withdrawn, as a second register was produced in which the young person was registered, and the bookkeeper says the entry was there before my visit, it is the last entry on the page, and the lad is not certified.
„	„ „	„ „	Employing a young person without a certificate of fitness.	0 1 0	0 13 6	
June [illegible]	W. G. Napier, letterpress printer, Shrewsbury.	Thos. Southam and Geo. Hole, Esqs., Shrewsbury.	Failing to make an entry and report of overtime.	0 5 0	0 11 0	
„	Ledger and Ledger, dressmaker, Shrewsbury.	„ „	Employing a woman more than five hours without an interval of half an hour for a meal.	0 10 0	0 17 6	
„ [illegible]	Anderson & Co., mineral water makers, Wolverhampton.	N. C. A. Neville, Esq., Stipendiary, Wolverhampton.	Employing three women on Sunday - -	6 0 0	1 17 6	
„	„ „	„ „	Employing two women after 9 p.m. - -	4 0 0	1 5 0	
„	Hobart, Bird, & Co., cycle makers, Wolverhampton.	„ „	Allowing a woman to remain in a room after 7 p.m. where a manufacturing process was being carried on.	- -	0 10 6	Dismissed, the defendants proved the woman was not at work. The Stipendiary said it was a very proper case to bring before him, but he could not convict.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Wolverhampton District—cont.	£ s. d.	£ s. d.	
1893.						
June 5	John Auley, lock maker, Union Street, Willenhall.	J. C. Tildesley, Esq., Dr. Hartill, Willenhall.	Employing two young persons without certificate of fitness.	2 0 0	1 5 0	
"	" "	" "	Employing two young persons without registering name, &c.	1 0 0	1 5 0	
"	Jas. Nightingale, key maker, Willenhall.	" "	Employing a young person before 6 a.m.	0 10 0	0 12 6	
"	John Edge, key maker, Willenhall.	" "	Employing a young person before 6 a.m.	0 2 6	0 12 6	
" 9	Jones Evans & Co. Limited, woollen manufacturers. Newtown.	W. Proctor, R. E. Jones and R. Lloyd, Esqs., Newtown.	Employing one young person after 6 o'clock in the evening.	2 0 0	0 7 0	
"	David Andrew, boot maker, Bettws, near Newtown.	" "	Failing to affix the prescribed Abstract of the Acts.	0 1 0	0 7 0	
"	Walter Griffiths, tailor, Bettws, near Newtown.	" "	Failing to affix the prescribed Abstract of the Acts.	0 1 0	0 7 0	
12	J. R. Tilley and Sons, tanners, Porter's Fields, Dudley.	W. E. Walker, John Aston and Sept. Baggot, Esqs., Dudley.	Employing one young person without a certificate of fitness from the certifying surgeon of the district.	0 10 0	0 7 6	
"	" "	" "	Employing one young person without entering the necessary particulars in the prescribed register.	0 10 0	0 8 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
June 20	Evan Williams, saw mill, Welshpool.	Ellis Jones, Esq., Colonel Twyford, Welshpool.	Employing one young person after 6 o'clock in the evening.	- -	0 5 0	As the occupier had ordered the young person to remain at work after 6 p.m., I asked for the full penalty, the chairman of the Bench said it was a trivial case, and they should fine 5s. to *include the costs*; it is impossible to induce a Welshpool Bench to fine anything more than a nominal penalty.
„ 28	J. H. Parker, mineral water maker, Snow Hill, Wolverhampton.	N. C. A. Neville, Esq., Stipendiary, Wolverhampton.	Failing to affix the prescribed Abstract of the Acts.	0 10 0	0 8 0	
„ 29	Wilfred Burden, saw mill, Montgomery.	H. O. Humphreys, Esq., Rev. — White, Montgomery.	Failing to give notice of commencing to occupy a factory.	0 13 6	0 6 6	
July 19	Elizabeth Henshaw, dressmaker, 2, Clifton Street, Wolverhampton.	C. F. Clarke and S. T. Mander, Esqs., Wolverhampton.	Employing five females after 4 p.m. on Saturday.	0 12 6	2 11 0	
„ 26	Alfred Priest, chain maker, 38, Providence Street, Cradley Heath.	W. Bassano and J. H. Smith, Esqs., Old Hill.	Employing one young person after 2 o'clock on Saturday afternoon.	- -	0 15 0	Fined the costs.
„	John Tromans, chain maker, Church Street, Cradley Heath.	„ „	Employing a young person after 2 p.m. on Saturday.	2 0 0	0 15 0	
Aug. 9	John Marston, japanner, Wolverhampton.	N. C. A. Neville, Esq., Stipendiary, Wolverhampton.	Failing to limewash his factory as required -	1 0 0	0 8 0	
„	James Hyde, brass founder, Wolverhampton.	„ „	Employing a young person without a certificate of fitness.	0 10 0	0 10 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
Aug. 14	W. Jones & Co., tailor, The Steps, Bridgnorth.	T. H. Deighton and H. McMichael, Esqs.	Employing two women after 4 o'clock on Saturday.	0 2 0	1 2 6	
"	Heasman & Co., brewers, Underhill Street, Bridgnorth.	" "	Employing one young person without a certificate of fitness from the certifying surgeon of the district.	0 1 0	0 15 6	
" 18	J. W. Luxmore, brewer, Ruyton - of - the - Eleven-Towns, Shropshire.	J. H. N. Walford and A. E. W. Darby, Esqs., Baschurch.	Failing to affix the prescribed Abstract - -	0 10 0	0 5 6	
" 22	E. Davies, baker, Shrewsbury	W. Phillips, G. J. Holt and T. Southam, Esqs., Shrewsbury.	Employing a young person before 5 a.m. -	0 10 0	0 12 6	
"	Geo. Palmer, baker, Shrewsbury.	" "	Failing to affix the prescribed Abstract -	0 5 0	0 12 6	
Sept. 29	Elizabeth McGregor, baker, Wolverhampton.	N. C. A. Neville, Esq., Stipendiary, Wolverhampton.	Failing to limewash within six months of the date of the last limewashing.	1 0 0	0 11 6	
Oct. 6	Andrew Potter, tarpaulin manufacturer, Wolverhampton.	" "	Failing to affix the prescribed Abstract - -	1 0 0	0 8 0	
"	Ford Harrison & Co., nut and bolt maker, Heath Town.	" "	Failing to limewash his factory within the past 14 months.	2 0 0	0 12 0	
"	" "	" "	Failing to keep their engine securely fenced -	1 0 0	0 10 0	
Oct. 13	Phillips and Son, letterpress printers, Newtown, North Wales.	R. E. Jones and Rd. Lloyd, Esqs., Newtown.	Failing to limewash their factory within 14 months from last limewashing.	1 0 0	0 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Wolverhampton District*—cont.	£ s. d.	£ s. d.	
Oct. 13	Williams & Co., saw mill, Newtown.	R. E. Jones and Rd. Lloyd, Esqs., Newtown.	Employing a young person without a certificate of fitness.	0 9 6	0 10 6	
„ 18	Charles Clark, carriage builder, Wolverhampton.	N. C. A. Neville, Esq., Stipendiary, Wolverhampton.	Failing to affix the prescribed Abstract -	0 5 0	0 8 0	
„	„ „	„ „	Employing a young person without a certificate of fitness.	1 0 0	0 9 0	
			In the Coventry District.			
Jan. 20	Edwin Archer, joiner and builder, 56, Abington Street, Northampton.	Henry Martin and William Coulson, Esqs., Northampton.	Employing a child over seven days without a certificate of fitness.	0 10 0	0 14 0	
„	Henry Berrill, letterpress printers, 29, Abington Street.	„ „	Employing a child for over seven days, namely, for eleven months, without a certificate of fitness.	- -	0 8 6	The Magistrates held that as this man had procured a labour certificate for the child the penalty need not be exacted.
„ 30	Sarah Jane Bull, dressmaker, 13, Priory Street, Coventry.	George Singer, (Mayor), and C. J. Hill, Esqs., Coventry.	Employing eight women after 4 p.m. on Saturday.	0 10 0	0 11 6	
Feb. 14	Stephen Waite, letterpress printer, Abingdon.	E. L. Shepherd, E. J. Trendell Esqs., Abingdon.	Employing a child for a period of nearly twelve months without a certificate of fitness.	0 8 6	0 11 6	
„ 28	Alexander Aldworth, machine maker, Abingdon.	J. H. Clarke and E. L. Shepherd, Esqs., Abingdon.	Employing two young persons for over seven days, namely, for nearly two years, without certificates of fitness.	0 18 0	1 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Coventry District*—cont.	£ s. d.	£ s. d.	
May 3	Edward Duckenfield, cutler, Northampton.	Henry Martin and Richard Cleaver, Esqs., Northampton.	Not having the Abstract of the Factory Act, affixed in his factory.	0 2 6	0 7 6	Ten shillings, including costs.
" 5	Mary Gurney, dressmaker, 33, York Road, Northampton.	Richard Cleaver and John Bingley, Esqs., Northampton.	Obstructing H.M. Inspector in the execution of his duty by refusing him admission to her workshop.	- -	0 6 6	Convicted in costs only on recommendation of the Bench, Miss Gurney pleading guilty and expressing regret.
" 17	Wilkins and Webster, brick makers, Coventry.	John Bill and W. F. Wyley, Esqs., Coventry.	Employing three young persons for over seven days without certificates of fitness.	1 0 0	0 11 6	
" 29	Mawby & Co., maltsters, Coventry.	George Singer and Charles J. Hill, Esqs., Coventry.	Not having the Abstract of the Factory Act affixed.	1 0 0	0 11 6	
"	Frederick J. Thomas, machinist, Coventry.	" "	Not having the Abstract of the Factory Act affixed.	1 0 0	0 11 6	
June 30	John Towle & Co., paper makers, Oxford.	The Mayor, and Alderman Saunders, Oxford.	Not affixing the Abstract of the Factory Act	0 5 0	0 7 0	
"	" "	" "	Not fencing certain dangerous parts of the mill-gearing.	0 10 0	0 7 0	
July 14	Charles P. Page, flour miller, South Newington (Oxon).	H. C. Risley and W. M. Foster Melliar, Esqs., Doddington.	Not having the Abstract of the Factory Act affixed.	0 5 0	0 7 0	
Aug. 4	Law and Tebbutt, boot manufacturers, Northampton.	Henry Martin and William Coulson, Esqs., Northampton.	Employing a young person over seven days without a certificate of fitness.	0 10 0	0 9 6	
Sept. 11	W. H. Smith, printer, Leamington.	S. T. Wackrill, Esq., and T. W. Thursfield, Esq., M.D., Leamington.	Employing two young persons for over seven days without the requisite certificate of fitness.	0 10 0	0 11 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Coventry District*—cont.	£ s. d.	£ s. d.	
Sept. 13	Henry Martin, builder, Northampton.	R. Turner and W. Coulson, Esqs., Northampton.	Not having the Abstract of the Factory Act affixed in his factory.	0 1 6	0 8 6	Ten shillings, inclusive of costs.
1892.			*In the Birmingham, No. 1, District.*			
Nov. 14	William Jones and Son, iron-founders, Cecil Street, Birmingham.	Sir Jas. Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Neglecting to keep register of young persons -	2 0 0	0 14 0	This had been accompanied by false entries, on the part of a clerk, as to dates of employment.
"	" "	" "	Employing three young persons without certificates of fitness.	2 0 0	1 14 0	Fined in costs only in two cases.
"	The Beacon Brick, Tile, and Pipe Co., Hobmoor Road, Smallheath.	" "	Occupying a factory without giving notice to an inspector.	0 5 0	0 10 6	
"	" "	" "	Neglecting to fence fly-wheel of engine -	1 0 0	0 10 6	
"	John Skidmore, hairpin maker, 92½, Watery Lane, Birmingham.	" "	Neglecting to affix Abstract at entrance of workshop.	1 10 0	0 12 0	Occupier had been twice cautioned, without avail.
"	Bordesley Green Brick Co., brick makers, Bordesley Green, Birmingham.	" "	Neglecting to fence fly-wheel of steam engine	2 0 0	0 10 6	No regard had been paid to instructions given on the subject.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
Nov. 4	J. T. and G. F. Morley, colour makers, 48, Goodrick Street, Birmingham.	Sir Jas. Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Neglecting to affix Abstract of the Act -	0 10 0	0 10 6	These occupiers had started without notice being sent.
"	F. W. Hindson & Co., glass mould makers, Bloomsbury Street.	" "	Neglecting to fence fly-wheel of a gas engine -	0 10 0	0 10 6	This had been previously ordered by me.
" 18	John Osborne, brass founder, 16, Theodore Street, Birmingham.	H. Payton and J. F. Brame, Esqs., J.P., Victoria Courts, Birmingham.	Neglecting to keep a register of young persons	1 0 0	0 11 6	
"	" "	" "	Employing four young persons uncertified -	1 0 0	2 4 0	Costs only in three cases.
"	Edgar Cox, wood carver, 11½, Essex Street, Birmingham.	" "	Neglecting to affix Abstract in workshop -	0 5 0	0 10 6	
"	Emily Achurch, dressmaker, 42, Muntz Street, Birmingham.	" "	Neglecting to give notice of opening a workshop.	- -	- -	Case dismissed. The Bench considered that the employment of the woman found working there was only intermittent.
"	Benton and Stone, brass founders, Bracebridge Street, Birmingham.	" "	Employing a young person uncertified -	0 10 0	0 14 0	
"	William McNickle, 350, Lichfield Road, Aston.	" "	Allowing his child, aged 12, to be employed full time.	0 5 0	- -	Costs remitted. This offence was accompanied by a fraudulent alteration of a birth certificate, for which the mother was severely censured by the Bench.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Birmingham, No. 1, District.*	£ s. d.	£ s. d.	
Nov. 23	Sarah McQuay, dressmaker, 15, Market Place, Redditch.	W. Bartleet, Esq., J.P., and F. Milward, Esq., J.P., Redditch Police Court.	Employing two young persons after 4 o'clock on the weekly half-holiday.	- -	0 17 0	First offence. Fined in costs only.
Dec. 2	William Bown, engineer, Bracebridge Street, Birmingham.	Sir Jas. Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Employing a young person uncertified	1 0 0	0 14 0	
"	A. W. Mills & Co., metal rollers, Garrison Lane.	" "	Employing a young person uncertified	1 0 0	0 14 0	
"	John and Edwin Wright, Limited, rope makers, Garrison Street.	" "	Neglecting to keep the required register of young persons.	1 0 0	0 10 6	
"	" "	" "	Employing a child uncertified	1 0 0	0 14 0	
"	" "	" "	Employing two children without school attendance certificates.	- -	0 10 0	Fined in costs.
"	Solomon Savitz, tailor, 45, Smallbrook Street.	" "	Neglecting to send opening notice	0 5 0	0 10 6	
"	" "	" "	Working overtime without having previously sent notice.	1 0 0	0 14 0	
" 5	Emma Roberts, dressmaker, 196, Lozello Road, Birmingham.	Alfred Hill, Esq., J.P., and Alderman Johnson, J.P., Police Court, Aston.	Employing two women at 4.30 p.m. on a Saturday.	0 5 0	0 18 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
Dec. 16	A. and E. Carr, waterproof bag makers, Metropolitan Road, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Opening a workshop without notice - -	0 5 0	0 10 6	
"	Rebecca Harris, tailoress, 23, Holloway Head, Birmingham.	" "	Not keeping Abstract affixed - - -	0 5 0	0 10 6	
"	" "	" "	Employing a woman overtime without notice	- -	0 6 6	Fined in costs.
"	M. H. and W. Dee, metal spinners, 48, Ellis Street, Birmingham.	" "	Employing two young persons at 8.30 p.m. -	- -	0 15 0	Fined in costs.
"	Sweeney and Blocksidge, machinists, Buck Street.	" "	Neglecting to keep register of young persons -	- -	0 7 6	Fined in costs.
"	Joseph Jukes, glass-blower, 235, Summer Lane.	" "	Not keeping Abstract affixed - - -	0 10 0	0 10 6	
"	H. Miller & Co., lamp makers, Miller Street.	" "	Neglecting to keep register of young persons -	0 10 0	0 14 0	
"	" "	" "	Employing two young persons uncertified -	- -	0 16 6	Fined in costs.
"	Samuel Nicholls, stamper and piercer, Princip Street.	" "	Neglecting to keep register of young persons -	0 10 0	0 14 0	
"	" "	" "	Employing two young persons uncertified -	- -	0 16 6	Fined in costs.
"	Gustav Goeden, tailor, 92, Pershore Street.	" "	Neglecting to affix Abstract - - -	0 5 0	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
Jan. 6	Thomas Kilby, gun barrel maker, 128, Steelhouse Lane, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Neglecting to give notice of opening a workshop.	0 5 0	0 10 6	
March 8	A. L. Glover, silversmith, 14, Nursery Road, Aston.	Major Ash, J.P., and H. Weiss, Esq., J.P., Aston Police Court.	Neglecting to keep the Abstract affixed	0 2 6	0 11 0	This was the first offence of this nature in this court. The Bench said that a much heavier penalty would be inflicted in future.
" 10	Thos. Auster & Co., axletree makers, Barford Street, Birmingham.	H. P. Ryland, Esq., J.P., and W. N. Fisher, Esq., J.P., Victoria Courts, Birmingham.	Employing a young person for three months unregistered.	0 1 0	0 15 0	The firm wished to transfer the charge against a foreman, but as it was a first offence I suggested that they should accept a nominal penalty, which course was adopted.
" 17	W. Dyke Wilkinson & Co., photograph frame makers, 44, Bradford Street, Birmingham.	J. F. Brame, J.P., and Eli Bloor, J.P., Esqs., Victoria Courts, Birmingham.	Employing a person under 16 years of age without obtaining a surgical certificate.	0 10 0	0 11 6	
"	Charles Taylor, lathe maker, Bartholomew Street, Birmingham.	" "	Employing a person under 16 years of age without obtaining a surgical certificate.	0 10 0	0 16 0	
" 24	Ernest Walter, tailor, 220, Coventry Road, Birmingham.	W. N. Fisher, Esq., J.P., and J. T. Brame, Esq., J.P., Victoria Courts, Birmingham.	Neglecting to keep the Abstract affixed	0 5 0	0 10 6	The defendant had opened a workshop without giving notice.
April 7	Alldays and Onions, Limited, cycle manufacturers, Sydenham Road, Birmingham.	H. P. Ryland, Esq., J.P., and W. N. Fisher, Esq., J.P., Victoria Courts, Birmingham.	Employing a woman during the night	2 0 0	0 15 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
April 7	Joseph Clarke, brass-founder, 71, Darwin Street, Birmingham.	H. P. Ryland, Esq., J.P., and W. N. Fisher, Esq., J.P., Victoria Courts, Birmingham.	Neglecting to keep the Abstract affixed	1 0 0	0 10 6	The defendant had opened a factory for several months without sending notice.
" 14	The Whitworth Cycle Co., cycle manufacturers, Macdonald Street, Birmingham.	Sir James Sawyer, Kt. J.P., and Eli Bloor, Esq., J.P., Victoria Courts, Birmingham.	Neglecting to send notice of opening	1 0 0	0 15 0	
"	" "	" "	Not keeping register of young persons	0 10 0	0 15 0	
"	" "	" "	Employing four young persons uncertified	-	1 19 0	Fined in costs.
"	W. Andrews, brass caster, 15, Buckingham Street, Birmingham.	" "	Not keeping register of young persons	1 0 0	0 16 0	The defendant did not enter an appearance.
"	Thos. Chetland and Sons, whip mount makers, 12, Benacre Street, Birmingham.	" "	Neglecting to fence mill-gearing	2 0 0	0 10 6	The defendant had opened a factory without notice.
"	Joseph Stevens and Sons, spoon manufacturers, Hanley Street, Birmingham.	" "	Employing five women at 8.45 p.m.	0 10 0	2 19 0	
"	Holliday and Williams, bedstead ornament makers, 5, Acton Road, Birmingham.	" "	Employing a young person uncertified	0 5 0	0 15 0	
"	Griffin and Leonard, printers, 103, Dale End, Birmingham.	" "	Not keeping register of young persons	0 5 0	0 10 6	
May 12	Mrs. M. A. Sullivan, bootmaker, 16, Smallbrook Street, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Neglecting to keep the Abstract affixed	0 2 6	0 10 6	The defendant pleaded ignorance.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
May 17	John W. Thompson, ginger beer maker, Burlington Street, Aston.	F. S. Bolton, Esq., J.P., and R. Peyton, Esq., J.P., Aston Police Court.	Neglecting to report the opening of a work-shop.	0 10 0	0 11 0	
June 2	Jones, Price & Co., stampers and piercers, St. George's Place, Birmingham.	H. P. Ryland, Esq., J.P., and W. N. Fisher, Esq., J.P., Victoria Court, Birmingham.	Neglecting to keep mill-gearing fenced	1 0 0	0 10 6	
"	Downes & Co., brass-founders, New Summer Street, Birmingham.	" "	Opening a factory without notice	1 0 0	0 10 6	
"	F. W. Addye, die-sinker, Harford Street, Birmingham.	" "	Employing a young person, aged 14, without a certificate of fitness.	1 0 0	0 14 0	
" 7	E. Washbourne, cycle maker, 85, Clifford Street, Aston.	J. A. Cooper, Esq., J.P., and A. W. Wills, Esq., J.P., Police Court, Aston.	Opening a factory without notice	0 2 6	0 11 0	
" 23	Fletcher, Fielding, and Sons, brass-founders, Penn Street, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Court, Birmingham.	Employing a person, under 16, without certificate.	0 5 0	0 15 0	
"	Edwin and Thomas Underwood, photo apparatus makers, Granville Street, Birmingham.	" "	Employing a person, under 16, without certificate.	0 5 0	0 15 0	
"	George Cope, bone turner, 165, Gooch Street, Birmingham.	" "	Employing two persons under 16, without certificates.	0 5 0	1 6 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
June 23	John Hanman & Co., cycle makers, Sydenham Road, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Employing a young person at 8.35 p.m.	0 10 0	0 15 0	
"	" "	" "	Employing a young person at 8.35 p.m.	- -	0 6 6	Fined in costs.
"	William Huggins and Sons, tube makers, Glover Street, Birmingham.	" "	Employing a person under 16 without certificate.	1 0 0	0 15 6	
"	" "	" "	Employing five other young persons without certificates.	- -	2 15 0	Fined in costs in other five cases.
"	Hardy and Brittain, bedstead makers, Glover Street, Birmingham.	" "	Employing a young person without certificate	0 10 0	0 11 0	
"	" "	" "	Not keeping register of young persons	- -	0 6 6	Fined in costs.
"	The Birmingham Battery and Metal Co., tube makers, Digbeth, Birmingham.	" "	Having a dangerous fly-wheel unfenced	2 0 0	0 10 6	
" 30	James Whetfield, brass-founder, 38, Oxford Street, Birmingham.	W. N. Fisher, Esq., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Having dangerous mill-gearing unfenced	4 0 0	0 10 6	
"	" "	"	Neglecting to affix the Abstract	0 10 0	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District—cont.*	£ s. d.	£ s. d.	
June 30	Smallwood & Co., tube manufacturers, River Street, Birmingham.	W. N. Fisher, Esq., J.P., and J. T. Brame, Esq., J.P., Victoria Courts, Birmingham.	Having the fly-wheel of engine unfenced -	3 0 0	0 10 6	
July 3	John Beardmore, weavers' mail maker, 36, Lennox Street, Aston.	Alderman Johnson, J.P., and G. G. Brodie, Esq., J.P., Police Court, Aston.	Neglecting to fence fly-wheel of engine -	0 5 0	0 10 6	Defendant pleaded ignorance.
" 14	Joseph Ratcliffe and Sons, brass-founders, 7, Unett Street, Birmingham.	W. N. Fisher, Esq., J.P., and H. P. Ryland, Esq., J.P., Victoria Court, Birmingham.	Employing two young persons uncertified -	3 0 0	1 6 0	
"	" "	" "	Neglecting to keep required register - -	1 0 0	0 10 6	
"	J. Truman & Co., fire-iron makers, 36, Lombard Street, Birmingham.	" "	Having dangerous mill-gearing unfenced -	2 0 0	0 10 6	
"	" "	" "	Employing a young person uncertified -	- -	0 9 0	Fined in costs.
"	" "	" "	Neglecting to affix Abstract - -	- -	0 6 6	Fined in costs.
"	Frederick Green & Co., drug grinders, 393, Farm Street, Birmingham.	" "	Employing a young person uncertified -	0 10 0	0 13 0	
" 17	Wm. Jno. Oakes, spur maker, 118, Alma Street, Aston.	G. G. Brodie, Esq., J.P., and R. P. Yates, Esq., J.P., Police Court, Aston.	Employing a young person without certificate of fitness.	0 10 0	0 11 0	
"	Saml. T. Lowe, nail maker, Gower Street, Aston.	"	Employing a young person without certificate of fitness.	0 10 0	0 11 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
July 21	T. Aston and Sons, rule makers, Lupin Street, Birmingham.	J. F. Brame, Esq., J.P., and Sir Jno. Sawyer, Kt., J.P., Victoria Court, Birmingham.	Employing a person under 16 uncertified -	1 0 0	0 14 0	
"	Edward Preston and Sons, rule makers, Whittall Street, Birmingham.	" "	Employing a person under 16 uncertified -	- -	0 11 0	Fined in costs. It appeared that the young person had induced the firm to believe he was 16.
"	Joseph Chambers, wire drawer, 66, Legge Street, Birmingham.	" "	Employing a person under 16 uncertified -	0 10 0	0 14 0	
"	Herbert Yates & Co., stampers and piercers, Dean Street, Birmingham.	" "	Employing a person under 16 uncertified -	1 0 0	0 14 0	
"	" "	" "	Employing a person under 16 uncertified -	- -	0 10 0	} Fined in costs.
"	" "	" "	Neglecting to keep register - - -	- -	0 6 6	
"	John Watson, metal polisher, and 43, Stainforth Street, Birmingham.	" "	Employing a person under 16 uncertified -	0 10 0	0 14 0	
"	Rolo Cycle Co., cycle makers, Stainforth Street, Birmingham.	" "	Employing a person under 16 uncertified -	1 0 0	0 14 0	
"	" "	" "	Employing a person under 16 uncertified -	- -	0 10 0	Fined in costs.
"	" "	" "	Neglecting to keep register - - -	0 10 0	0 10 6	
"	" "	" "	Neglecting to affix Abstract - - -	0 10 0	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
Sept. 22	W. Sumes, Limited, organ builders, Woodfield Road, Birmingham.	W. N. Fisher, Esq., J.P., and H. P. Rylands, Esq., J.P., Victoria Courts, Birmingham.	Employing a person under 16 years of age without certificate.	1 0 0	0 14 0	
"	" "	" "	Not keeping register of young persons	- -	0 6 6	Fined in costs.
"	Holyhead, confectioners, 75, Jamaica Row, Birmingham.	" "	Employing a woman at night	1 0 0	0 14 0	
"	" "	" "	Not affixing the Abstract	0 10 0	0 10 6	
"	H. W. Lawrence, fender maker, 151, Conybere Street, Birmingham.	" "	Not keeping register of young persons	1 0 0	0 14 0	
"	" "	" "	Employing three persons under 16 years of age without certificates.	- -	1 8 6	Fined in costs.
" 29	Daniel and Arter, spoon manufacturers, Upper Highgate Street, Birmingham.	Sir James Sawyer, Kt., J.P., Eli Bloor, Esq., J.P., Victoria Court, Birmingham.	Employing a person under 16 without surgical certificate.	0 10 0	0 14 0	
"	" "	" "	Employing a person under 16 without surgical certificate.	- -	0 11 0	Fined in costs.
"	" "	" "	Not keeping register of young persons	- -	0 7 6	Fined in costs.
"	John S. Downing, manufacturer of stationers' sundries, Commercial Streeet, Birmingham.	" "	Employing a young person uncertified	0 10 0	0 14 0	
"	" "	" "	Employing a young person uncertified	- -	0 11 0	Fined in costs.
"	" "	" "	Not keeping register of young persons	- -	0 6 6	Fined in costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
Oct. 6	Mrs. S. R. Stephens, wholesale bonnet maker, Ernest Street, Birmingham.	W. N. Fisher, Esq., J.P., Dr. C. Warden, J.P., Victoria Courts, Birmingham.	Employing a person under 16 years of age uncertified.	0 10 0	0 14 0	
"	" "	" "	Employing a person under 16 years of age uncertified.	- -	0 10 0	Fined in costs.
" 13	Edward Hood, metal spinner, 24, Bishop Street, Birmingham.	Ald. Barrow, J.P., and Eli. Bloor, Esq., J.P., Victoria Courts, Birmingham.	Employing a person under 16 years of age uncertified.	0 10 0	0 10 0	
"	" "	" "	Not keeping register of young persons - -	- -	0 10 6	Fined in costs.
" 20	Alfred Bishop and Son, bridle cutters, 272, Great Colmore Street, Birmingham.	H. P. Ryland, Esq., J.P. and W. Gilliver, Esq., J.P., Victoria Courts, Birmingham.	Neglecting to affix workshop Abstract - -	0 10 0	0 14 0	
"	Thomas Griffin, butcher's hook maker, 92½, Irving Street, Birmingham.	" "	Opening workshop without notice - -	1 0 0	0 14 0	
"	John Marshall, firewood cutter, Brass Street, Birmingham.	" "	Opening factory without notice - - -	1 0 0	0 11 6	Or one month's imprisonment. Defendant had been already warned for opening another factory without notice.
"	" "	" "	Having unfenced shafting - - -	1 0 0	0 10 6	
"	Bourne and Clarke, tube manufacturers, St. Jude's Passage, Birmingham.	"	Not keeping register of young persons - -	0 10 0	0 14 0	
" 27	W. E. Tedd, foreman at Miller & Co., lamp makers, Miller Street, Birmingham.	Sir James Sawyer, Kt., J.P. and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	Employing a young person without having the name registered.	0 10 0	0 14 0	Proceeded against as the actual employer.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 1, District*—cont.	£ s. d.	£ s. d.	
Oct. 27	Ann Elizabeth Beck, venetian blind maker, 167, Barr Street.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Courts, Birmingham.	For not having Abstract affixed - - -	0 10 0	0 14 0	
"	Alfred Horton, watch case maker, 189, Barr Street.	" "	For not having Abstract affixed - -	0 2 6	0 14 0	
"	Emily Butt, paper box maker, 16, Barr Street.	" "	For not having Abstract affixed - - -	0 1 0	0 14 0	
"	Christopher Swale, engraver, 83, Constitution Hill.	" "	For not having Abstract affixed - -	0 5 0	0 14 0	
"	James Parkes and Son, cycle-fitting makers, Brook Street, Aston.	" "	Employing two young persons uncertified -	0 10 0	1 8 0	
" 30	Joseph Tomey and Son, glass manufacturers, Catherine Street, Aston.	Alfred Hill, Esq., J.P., and Alderman Johnson, J. P., Police Court, Aston.	Employing a person under 16 years of age uncertified.	0 10 0	0 10 6	
1892.			*In the Birmingham, No. 2, District.*			
Nov. 4	Edward Hales, brick maker, Washwood Heath, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Law Courts, Birmingham.	Having no Abstract affixed, on 22nd September 1892.	0 10 0	0 14 0	
"	" "	" "	Employing two young persons under 16 years old, seven days without certificates of fitness.	1 0 0	1 4 0	Costs only in one case.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Birmingham No. 2 District*—cont.	£ s. d.	£ s. d.	
Nov. 18	Hudson, Edmunds, & Co., copper tube makers, Sheepcote Street, Birmingham.	Henry Payton, and J. F. Brame, Esqs., Victoria Law Courts, Birmingham.	Not having entered names of young persons in register.	1 0 0	0 6 6	
"	" "	" "	Employing five young persons under 16 years, over seven days without having obtained certificates of fitness.	2 0 0	3 2 0	
"	Busby and Wright, brass chain makers, Sheepcote Street, Birmingham.	" "	Not having entered names of young persons in register on 26th October 1892.	- -	0 6 6	
"	" "	" "	Employing three young persons under 16 years, over seven days without having obtained certificates of fitness.	2 0 0	1 18 0	
Dec. 2	Rackham & Co., dressmakers, North Western Arcade, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., Victoria Law Courts, Birmingham.	Employing two women after 4 p.m. on Saturday.	2 0 0	1 8 0	
"	J. W. Bragg, engineer, 61, Sumner Hill Street, Birmingham.	" "	Failing to have an Abstract of the Act affixed	1 0 0	0 10 6	
"	James Baldwin and Sons, letterpress printers, &c., Morville Street, Birmingham.	" "	Employing three women and two young persons after 4 p.m. on Saturday.	1 0 0	2 14 0	
" 9	Joseph Walker & Co., brass founders, Regent Parade, Birmingham.	" "	Not duly reporting an accident to Nellie Welch, on the 10th November 1892, to the inspector of the district.	1 0 0	0 14 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Birmingham, No. 2, District*—cont.	£ s. d.	£ s. d.	
Dec. 9	Joseph Walker & Co., brass founders, Regent Parade, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Law Courts, Birmingham.	Failing to procure certificates of fitness, after seven days employment, for six young persons under 16 years of age.	1 0 0	3 4 0	Costs only in five cases, as this was the first offence of the kind.
" 16	Mrs. E. A Downer, dressmaker, 33, Villa Road, Handsworth.	George Heaton and George Tangye, Esqs., Public Offices, Handsworth.	Having no Abstract of the Factory Acts affixed in her workroom.	- -	0 11 6	Fined costs only, as the Magistrates thought it was inadvertence rather than wilful neglect.
" 23	John Banks, jeweller, 6, Northampton Street, Birmingham.	Sir James Sawyer, Kt., J.P., and J. F. Brame, Esq., J.P., Victoria Law Courts, Birmingham.	Employing three young persons after 8 p.m. -	0 10 0	1 14 0	
"	Sheldon Bros., jewellers, 6, Vyse Street, Birmingham.	" "	(1.) Employing a young person after 8 p.m. -	0 10 0	0 14 0	
"	" "	" "	(2.) Working, at same hour, three females overtime in the warehouse, without previously filling in the prescribed record and sending notice to the inspector.	- -	0 10 0	
1893.						
Jan. 20	Henry Pearce, jeweller, 19, Spencer Street, Birmingham.	Sir James Sawyer, Kt., J.P., George Tangye, and J. F. Brame, Esqs., Victoria Law Courts, Birmingham.	Having neglected to maintain the fencing to a certain pulley and shafting in an efficient state, whereby one Ellen Cherry, a woman, was seriously injured.	5 0 0	0 16 0	This was taken under section 82, but the Bench said that they adjudicated on it "simply as an "infringement of the Factory "Act, leaving the woman to "take her remedy under another "Act." The amount of the fine was awarded by the Secretary of State to the injured person.
"	John Taylor & Co., cornice pole ring makers, 29, Tenby Street, Birmingham.	" "	Employing women and young persons after 7 p.m., viz., at 9 p.m. Six cases.	0 5 0	3 2 0	The defence was that the engine stopped at 7 p.m., and these persons were only stock-taking and not working. Fined in first case. Costs only in others.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 2, District*—cont.	£ s. d.	£ s. d.	
Mar. 10	W. A. Lloyd & Co., cycles, Lionel Street.	Walter Fisher and Howard Ryland, Esqs., Victoria Law Courts, Birmingham.	1. Employing a young person after 7 p.m., namely, at 8.28 p.m.	1 0 0	0 15 0	
"	" "	" "	2. Employing same young person over seven days without having obtained a certificate of fitness from the certifying surgeon on the same date.	0 2 6	0 10 6	
April 14	W. H. Wilmot, jeweller, 80, Spencer Street, Birmingham.	Sir James Sawyer, Kt., J.P., and Eli Bloor, Esq., Victoria Law Courts, Birmingham.	Employing two young persons under 16 years of age over seven days without a certificate of fitness.	0 5 0	1 7 0	
"	" "	" "	Failing to keep the prescribed register in prescribed form viz., not having entered names of two young persons.	- -	0 6 6	
May 19	St. George's Engineering Co., cycle makers, Pope Street, Birmingham.	Walter N. Fisher and Howard Ryland, Esqs., Victoria Law Courts, Birmingham.	Employing three young persons after 8 o'clock in the evening.	2 0 0	1 17 0	Convicted in costs only in two cases.
"	Alfred Walters, jeweller's enameller, 60, Northampton Street, Birmingham.	" "	1. Not having a workshop Abstract affixed in his workshop.	1 0 0	0 15 0	
"	" "	" "	2. Employing a young person Albert Bishop after 8 o'clock in the evening.	- -	0 6 6	Convicted in costs.

Return of Prosecutions—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1893.			*In the Birmingham, No. 2, District*—cont.	£ s. d.	£ s. d.	
June 2	J. B. Brooks & Co., cycle saddlers, Criterion Works, Great Charles Street, Birmingham.	W. N. Fisher and Howard Ryland, Esqs., Victoria Law Courts, Birmingham.	Employing three young persons after 8 p.m.	1 0 0	1 16 0	Convicted in costs only in two cases.
"	Louisa F. Davis, fancy box maker, 5, Caroline Street, Birmingham.	" "	Employing a woman overtime without having in the workshop affixed a notice containing the prescribed particulars.	0 5 0	0 10 6	The magistrates accepted the excuse offered, namely, that the defendant had left, and the women were working late unknown to her.
"	Jno. J. Tilley, tailor, 12, Cherry Street, Birmingham.	" "	Employing a woman overtime without having in the workshop affixed a notice containing the prescribed particulars.	1 0 0	0 10 6	
" 23	Sarah L. Young, dressmaker, 25, Archibald's Road, Lozells, Birmingham.	R. P. Yates, Esq., and Dr. Oliver Pemberton, Police Court, Aston.	Employing a woman after 4 p.m. on Saturday	0 2 6	- -	Nominal penalty only, as defendant said she thought she could keep the woman to make up the time (three-quarters of an hour), she was late in the morning. Costs remitted.
" 20	Mary and Emily Abbott, dressmaker, 65, Hagley Road, Birmingham.	W. N. Fisher and J. F. Brame, Esqs., Victoria Law Courts, Birmingham.	Employing two women after 4 p.m. on Saturday.	1 0 0	1 6 0	Fined in one case. Costs only in the other.
July 7	Wm. Morris and Son, copper mill, Freeth Street, Birmingham.	J. F. Brame, Esq., J.P., and Dr. Leach, Victoria Law Courts, Birmingham.	1. Not keeping register in prescribed form (not entering names of two young persons).	0 10 0	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Birmingham, No. 2, District*—cont.	£ s. d.	£ s. d.	
July 7	Wm. Morris and Son, copper mill, Freeth Street, Birmingham.	J. F. Brame, Esq., J.P., and Dr. Leach, Victoria Law Courts, Birmingham.	2. Employing two young persons under 16 years over seven days without certificates of fitness.	- -	1 2 0	Convicted in costs only.
Aug. 11	Billing Bros., and Whitmore, letter-press printers and lithographers, 11, St. Paul's Square, Birmingham.	Howard Ryland, and Newton Fisher, Esqs., Victoria Law Courts, Birmingham.	Failing to maintain in an efficient state the fencing to certain cog-wheels of a machine whilst in motion whereby one Carl Doubleday was injured.	0 10 0	0 15 0	I did not press for a heavy penalty as the machine-minder had removed this guard.
„ 25	E. Armfield & Co., button manufacturers, 8, St. Paul's Square, Birmingham.	Howard Ryland, Esq. and Dr. Leach, Victoria Law Courts, Birmingham.	(1.) Not keeping the register with prescribed particulars, viz.: no entries at all.	0 10 0	0 10 6	
„	„ „	„ „	(2.) Failing to obtain the surgeon's certificate for a young person under 16 years after seven days' employment.	1 0 0	0 14 0	
„ 29	William West, retail baker, High Street, Sutton Coldfield.	H. Duncalfe, and A. L. Crockford, Esqs., Police Court, Sutton Coldfield.	Employing a young person under 16 years of age on Saturday, both before and after the proper hours, viz.: from 3 a.m. to 7 p.m.	0 2 6	0 14 0	As this is the first case of the kind in this borough, and the boy was out with the cart a portion of the day, I did not press for a substantial penalty.
Oct. 6	Samuel Krinks, electro-plater, 235, Icknield Street, Birmingham.	Dr. Charles Warden, and T.N. Fisher, Esq., Victoria Law Courts, Birmingham.	1. Working overtime in warehouse and not having record of overtime affixed.	1 0 0	0 10 6	
„	„ „	„ „	2. Overworking a woman in lacquering -	- -	0 10 0	Convicted in costs only.
„ 13	George Allen, pearl cutter, Branston Street, Birmingham.	— Burrow, and — Bloor, Esqs., Victoria Law Courts, Birmingham.	Not having an Abstract affixed in his workshop.	0 10 0	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Worcester District.*	£ s. d.	£ s. d.	
Nov. 9	Belcher and Keen, plate enamellers, Quay Street, Gloucester.	B. Bonner, A. Estcourt, and T. Denton, Esqs., City Police Court, Gloucester.	Neglecting to affix in their factory, and to keep so affixed in the prescribed form, the prescribed Abstract of the Factory and Workshop Act, 1878.	0 5 0	0 6 0	
" 18	Arnold Perret & Co., Limited, Wickwar Brewery, Gloucestershire.	Major-Gen. Hale and Canon R. S. Nash, Petty Sessions, Chipping Sodbury.	(1.) Neglecting to fence a certain hoist	5 0 0	9 7 0 (both charges)	Withdrawn on payment of costs by defendants. The requisite fencing to be erected and submitted for the approval of H. M. Inspector in less than two months from this date. This order applies to the hoist as well as the fly wheels.
"	" "	" "	(2.) Neglecting to fence certain fly-wheels	-		
"	" "	" "	(3.) Being the occupiers of a factory in which one James Richards was killed in consequence of their neglect as such occupiers to fence a certain hoist.	Dismissed	0 3 6	In the last case the Magistrates did not think there was sufficient evidence to prove that deceased was killed by neglect to fence the hoist.
1893.						
June 9	Walter Jackson, linen shirts and collars, Eagle Mill, Tewkesbury.	Thos. Collins (Mayor), Jas. Coleman, and W. Rice, Esqs., Town Hall, Tewkesbury.	Employing a young person without having entered the necessary particulars respecting him in the prescribed form of register.	0 3 0	0 9 0	A fine of 3s. and costs was imposed in each case. These cases had been adjourned from the 26th May at the request of Mr. Jackson. (both cases)
"	" "	" "	Employing five young persons under the age of 16 years, for more than seven days without having obtained certificates of fitness from the certifying surgeon of the district.	0 15 0	2 5 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Swansea District.*	£ s. d.	£ s. d.	
Nov. 2	David Davies, Joinery Works, Cathays, Cardiff.	T. W. Lewis, Esq., Stipendiary, and Dr. Paine, Borough Sessions, Cardiff.	Neglecting to affix an Abstract of the Act in his factory.	0 2 6	0 6 6	New factory. Offence discovered on first visit.
"	" "	" "	Neglecting to send notice to H. M. Inspector of an accident which occurred at his factory.	Dismissed	Dismissed	It was proved that the injured man did five hours work upon each of the three days succeeding the date of the accident. No order as to costs.
"	A. Dorstich, saw mills, Cardiff	" "	Neglecting to affix an Abstract of the Act in his factory.	2 0 0	0 6 6	Defendant's manager had been previously cautioned.
"	Bute Steam Joinery Co., Dumballs Road, Cardiff.	" "	Employing two children for five months without certificates of fitness.	1 0 0	0 6 6	Manager had been previously instructed and cautioned.
"	" "	" "	Employing the same two children on full time for five months.	1 0 0	0 6 6	
" 5	Henry Parfitt brick manufacturer, Cwmbran, Mon.	Col. Byrde, and E. J. Phillips, Esq., Pontypool County Sessions.	Neglecting to affix an Abstract of the Act at his brick works at Upper Cwmbran.	0 1 0	0 6 6	
"	" "	" "	Omitting to fence dangerous machinery at his brick works at Greenmeadow.	1 13 6	0 6 6	Manager had been previously cautioned.
" 10	The Eastern Valleys Tin Plate Co., Caerleon Works, near Newport Mon.	F. J. Mitchell, and John Lawrence, Esqs., Caerleon Petty Sessions.	Neglecting to fence certain mill-gearing, whereby a young person sustained serious bodily injuries.	3 0 0	2 0 0	The evidence was heard on the 10th November and the decision given on the 24th November, the Magistrates in the meantime having visted the factory. Fine was imposed under section 82 and by order of the Secretary of State was awarded to the father of the injured person.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
Nov. 15	The Severn Tin Plate Co., Caldicot Works, near Chepstow.	Godfrey Seys, and Jas. Evans, Esqs., Chepstow County Petty Sessions.	Omitting to send notice to H. M. Inspector of an accident which occurred on 11th July 1892.	1 0 0	0 14 9	
„ 23	John Henry James, Steam Joinery Works, Pontypridd.	T. P. Jenkins, and E. Edwards, Esqs., Petty Sessions, Pontypridd.	Employing two young persons for six months without certificate of fitness.	- -	0 8 0	Defendant's manager had been cautioned on a previous visit. Offences were admitted and defendant was fined 1*l.* for neglecting to fence and costs in the three cases.
„	„ „	„ „	Employing two young persons for six months without keeping a register.	- -	0 8 0	
„	„ „	„ „	Neglecting to fence the fly-wheel of a steam engine.	1 0 0	0 8 0	
„	Wm. Thomas & Co., builders, Pontypridd.	„ „	Neglecting to fence the fly-wheel of a steam engine.	- -	0 13 0	Manager had been cautioned on a previous visit. Defendants admitted the offence and were ordered to pay costs only.
Dec. 2	The Tydvil Engineering and Ship Repairing Co., Limited, East Bute Deck, Cardiff.	T. W. Lewis, Esq., Stipendiary, and Dr. Paine, Boro' Sessions, Cardiff.	Neglecting to fence the cog-wheels of a drilling machine.	1 0 0	0 6 6	
„	Wm. Driffield, dressmaker, 113, Queen Street, Cardiff.	„ „	Neglecting to affix a copy of the Abstract of the Act in his workshop.	0 10 0	0 6 6	
„ 10	Farrant and Frost, printers, 135, High Street, Merthyr Tydvil.	W. Smyth, Esq., and Col. Cresswell, Boro' Sessions, Merthyr.	Employing a young person and a child without keeping a register.	0 10 0	0 7 0	Defendants had been previously cautioned and similar offences had been previously condoned.
„	„ „	„ „	Employing a child during a period of two months without a certificate of fitness.	1 0 0	0 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
Dec. 13	John Fryer, Wood Turnery Works, near Tintern.	Godfrey Seys, and Henry Clay, Esqs., County Petty Sessions, Chepstow.	Neglecting to fence the main belt in his factory.	0 2 6	0 8 0	Both of these offences were admitted, and being the first of the kind at this court, I agreed, at the suggestion of the Bench, to nominal penalties with costs.
"	Harriet Roberts, dressmaker, 1, Exmouth Place, Chepstow.	" "	Neglecting to affix an Abstract of the Act in her workshop.	0 2 6	0 7 6	
" 22	Kennington Hall, milliner, Beaufort House, Monmouth.	W. Honeyfield (Mayor) and G. G. Griffin, Esqs., Boro' Sessions, Monmouth.	Neglecting to affix an Abstract of the Act in his workshop.	- -	0 6 6	Offence was admitted, and owing to its being the first of its kind brought before this court, defendant was mulcted in costs only.
" 27	William Selway, Wood Turnery Works, Llandogo.	R. H. Oakley, Esq., and Rev. L. A. Rees, County Sessions, Trelleck.	Neglecting to affix an Abstract of the Act in his factory.	0 2 6	0 5 6	
"	" "	" "	Neglecting to fence the main belt in his factory.	0 2 6	0 5 6	
1893.						
Jan. 12	Williams, Foster, and Co., Limited, Morfa Copper Works, Hafod, near Swansea.	J. C. Fowler, Stipendiary, and A. Mason, Esqs., Boro' Sessions, Swansea.	Employing a male young person on more than six nights in two weeks.	1 11 6	0 8 6	
"	The Swansea Firewood and General Supply Co., Limited, Swansea.	" "	Employing four young persons without the prescribed certificate of fitness.	0 6 0	1 14 0	
" 13	The Ynysmendwy Tin Plate Co., Swansea Valley.	Herbert Lloyd and John Player, Esqs., County Sessions, Pontardawe.	Employing two male young persons on more than six nights in two weeks.	0 2 0	0 16 6	The offence was admitted, and being the first of the kind heard at this court, a nominal penalty was inflicted.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
Jan. 24	Morris and Smith, Steam Saw Mills, Cardiff.	T. W. Lewis, Esq., Stipendiary, and H. J. Paine, Esq., M.D., Boro' Sessions, Cardiff.	Employing a young person during a period of six months without the prescribed certificate of fitness.	0 10 0	0 6 6	
"	Jane Rowlands, dressmaker, 56, Woodville Road, Cardiff.	" "	Failing to affix an Abstract of the Act in her workroom.	0 10 0	0 6 6	
Feb. 21	Mansfield and Son, Engineering Works, Collingdon Road, Cardiff.	" "	Neglecting to send notice of accident to H.M. Inspector of Factories.	1 0 0	0 6 6	
"	" "	" "	Neglecting to fence fly-wheel of engine and cog-wheels of drilling machine.	5 0 0	0 6 6	Defendants had been cautioned on previous visit.
" 24	Benjm. Thomas, brick manufacturer, Briton Ferry.	T. S. Sutton, and J. B. Paddon, Esqs., County Sessions, Neath.	Neglecting to fence fly-wheel and crank of engine.	2 0 0	0 9 6	
"	" "	" "	Employing a child full time during a period of three months.	0 2 6	0 8 6	
Mar. 3	The Phœnix Foundry Co., James Street, Newport, Mon.	Henry Philips and J. S. Stone, Esqs., Boro' Sessions, Newport.	Employing a young person for seven months without a certificate of fitness.	1 0 0	0 7 6	
" 27	Wm. Williams, tailor, Melyncrythan, near Neath.	E. E. Bevan (Mayor), and J. D. Llewellyn, Esqs., Boro' Sessions, Neath.	Omitting to affix an Abstract of the Act in his workshop.	0 10 0	0 7 6	Defendant had been cautioned on previous visit.
"	Leach, Flower, & Co., Limited, steel and tin plate manufacturers, Melyn Works, Neath.	" "	Employing a child without the prescribed certificate of fitness.	- -	0 8 6	Defendants were mulcted in Court costs only, having summoned their mill manager, under section 87, who was fined as below.
"	" "	" "	Employing a child for a period of three weeks on full time.	- -	0 8 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
Mar. 27	David Bamford, mill manager, Melyn Works, Neath.	E. E. Bevan (Mayor), and J. D. Llewellyn, Esqs., Boro' Sessions, Neath.	Employing the child above referred to for a period of three weeks on full time.	3 0 0	0 8 6	
"	" "	" "	Employing the aforementioned child without the prescribed certificate of fitness.	1 10 0	0 8 6	
April 12	Abraham Eedy, boot manufacturer, 90, Salisbury Road, Cardiff.	T.W. Lewis, Esq., Stipendiary, and Dr. J. H. Paine, Boro' Sessions, Cardiff.	Employing a child at 5.15 p.m. on Wednesday, being the day substituted for Saturday.	2 0 0	0 6 6	
" 14	The Resolven Tin Plate Co. Limited, "Clyne" Works, Resolven, near Neath.	J. H. Rowlands, and W. Leyson, Esqs., County Sessions, Neath.	Employing two women at 9.40 p.m. on Friday	2 0 0	0 16 9	
" 25	The Dinas Silica Co., Silica Works, Glynneath.	W. J. North, Stipendiary, and R. H. Rhys, Esqs., County Petty Sessions, Aberdare.	Neglecting to fence a steam engine fly-wheel and mill-gearing.	5 0 0	0 9 0	
" 26	Arthur Young, paper maker, 30, Pembroke Road, Cardiff.	T.W. Lewis, Esq., Stipendiary, and Dr. J. H. Paine, Boro' Sessions, Cardiff.	Uttering a false certificate of the birth of his son at the Ely Paper Works, knowing the same to be false.	3 0 0	0 6 6	The certificate was presented to the certifying surgeon, who detected the falsification.
"	Wm. Jones, printer, 6, Duke Street, Cardiff.	" "	Employing a young person during a period of five months without keeping the prescribed register.	0 5 0	0 6 6	
May 3	George B. Hammond & Co., tinplate manufacturers, Treforest.	Ignatius Williams, Esq., Stipendiary, and T. P. Jenkins, Esq., County Sessions, Pontypridd.	Employing a male young person by night who had worked during the preceding day.	1 0 0	0 8 0	
"	" "	" "	Employing a male young person on more than six nights in two weeks.	2 0 0	0 8 0	
" 5	John Banwell, pottery and brick works, Crindan, near Newport, Mon.	H. Phillips and J. S. Stone, Esqs., Newport Boro' Sessions.	Neglecting to fence fly-wheel and driving-pulley of steam engine.	0 10 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
May 5	D. Howell & Co., factory bakehouse, Church Road, Newport, Mon.	H. Philips and J. S. Stone. Esqs., Newport Boro' Sessions.	Neglecting to send notice of accident to H.M. Inspector.	0 1 0	0 8 0	The solicitor who appeared for the company admitted the offence, but pleaded ignorance of the Act in mitigation.
June 2	Phillips & Co., milliners, Commercial Road, Newport, Mon.	H. Phillips and D. O'Vaughan, Esqs., Boro' Sessions, Newport, Mon.	Employing two women at 10.30 p.m., on Saturday.	0 5 0	0 8 0	
"	" "	" "	Neglecting to report overtime and to keep a record of the said overtime.	0 2 6	0 8 0	
"	Williams and Smith, tailors, 20, Commercial Road, Newport, Mon.	" "	Employing two women at 10.15 p.m., on Saturday.	0 5 0	0 12 0	Solicitor for the defence pleaded that the women might have finished work much earlier, had they tried to do so, and one of them gave evidence in support of that statement.
"	" "	" "	Neglecting to report overtime and to keep a record of the said overtime.	0 2 6	0 9 6	
" 5	Wm. Burridge, baker, Llangyfelach Road, Swansea.	Alderman Tulloch and Dr. J. G. Hall, Boro' Sessions, Swansea.	Neglecting to affix Abstract of the Act -	0 11 6	0 8 6	Each of these defendants had been previously visited and furnished with an Abstract of the Act, but Mr. Yendall proved that the Abstract had once been affixed, and had been taken down prior to limewashing.
"	Henry White, baker, Duke Street, Swansea.	" "	Neglecting to affix Abstract of the Act -	0 11 6	0 8 6	
"	Jas. Yendall, baker, St. Thomas, Swansea.	" "	Neglecting to affix Abstract of the Act -	0 1 6	0 8 6	
"	W. R. Jefford, Oxford Street Bakery, Swansea.	" "	Neglecting to affix Abstract of the Act -	0 11 6	0 8 6	
"	F. E. Nicholls, Waterloo Bakery, Swansea.	" "	Neglecting to affix Abstract of the Act -	0 11 6	0 8 6	
"	A. Pickard, Argyle Bakery, Swansea.	" "	Neglecting to affix Abstract of the Act -	0 11 6	0 8 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
June 6	John E. Davies, Western Joinery Works, Cardiff.	T. W. Lewis, Esq., Stipendiary, and J. Rees, Esq., Boro' Sessions, Cardiff.	Neglecting to fence a steam engine and mill-gearing in basement of his mill.	5 0 0	0 7 6	
"	Slip Sawing Mills, Limited, Barley Mow Lane, Cardiff.	" "	Employing a young person for two months without a certificate of fitness.	0 10 0	0 7 6	
"	John Jones, milliner, 52, Castle Road, Cardiff.	" "	Employing a woman at 10.10 p.m. on Saturday	2 0 0	0 6 6	
"	Mrs. E. H. Edwards, dress and mantle maker, Salisbury Road, Cardiff.	" "	Employing three women and two young persons at 10.40 p.m., on Saturday.	- -	- -	Adjourned to 20th June at request of the defendants' solicitors.
"	S. J. Dodington, Tudor Road Bakery, Cardiff.	" "	Employing a male young person at 4.35 a.m., on Saturday.	- -	- -	Adjourned to 20th June at request of the defendants' solicitors.
"	W. J. Birtwhistle, The Hayes Bakery, Cardiff.	" "	Employing a male young person on Sunday	- -	- -	Adjourned to 20th June at request of the defendants' solicitors.
"	T. E. Phillips, Strathnairn Street Bakery, Cardiff.	" "	Neglecting to affix an Abstract of the Act in his bakehouse.	0 5 0	0 6 6	
"	R. J. Holliman, baker, 32, Crwys Road, Cardiff.	" "	Employing a male young person from 6.35 a.m. to 7.20 p.m., allowing only three-quarters of an hour for meal times.	- -	- -	Dismissed with caution, no order made as to costs.
June 20 (adjourned from June 6.)	Mrs. E. H. Edwards, dressmaker, Salisbury Road, Cardiff.	T. W. Lewis, Esq. Stipendiary, Borough Sessions, Cardiff.	Employing two female young persons and three women at 10.40 p.m. on Saturday.	2 10 0	1 12 6	
"	S. J. Doddington, baker, 52, Tudor Road, Cardiff.	" "	Employing a male young person at 4.35 a.m. on Saturday.	0 10 0	0 7 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
June 20 (adjourned from June 6.)	W. J. Birtwhistle, manager of bakery, The Hayes, Cardiff.	T. W. Lewis, Esq. (Stipendiary), Borough Sessions, Cardiff.	Employing a male young person on Sunday	0 1 0	0 6 6	The Stipendiary took a lenient view of this offence, on account of the defendant having been but very recently appointed manager.
" 28	Thos. Lockyer, milliner, Vaughan Street, Llanelly.	J. H. Rogers and David Evans, Esqs., County Sessions, Llanelly.	Employing two women at 10.25 p.m. on Saturday.	0 10 0	0 16 0	
"	Richard Davies & Co., milliners, The Emporium, Llanelly.	" "	Employing two women at 10.40 p.m. on Saturday.	0 10 0	0 16 0	
"	D. R. Morgan & Co., dress and mantle makers, Stepney Street, Llanelly	" "	Employing two women and one female young person at 10.50 p.m. on Saturday.	0 15 0	1 4 0	
July 3	John Jones, dressmaker, &c., Merthyr Tydvil.	W. N. North, Esq. (Stipendiary), and W. Smyth, Esq., County Sessions, Merthyr.	Employing five women and one female young person at 10.30 p.m. on Saturday.	1 4 0	0 7 0	
"	J. S. Davies, milliner, Dowlais	" "	Employing three women and one female young person at 10.5 p.m. on Saturday.	2 0 0	0 7 0	Previous conviction for similar offence.
"	" "	" "	Omitting to send notice and to keep a record of overtime.	2 0 0	0 7 0	
" 4	Wm. Lloyd, milliner, &c., Mountain Ash.	W. N. North, Esq. (Stipendiary), and R. H. Rhys, Esq., County Sessions, Aberdare.	Employing one woman at 10.10 p.m. on Saturday.	2 0 0	0 7 0	Previous conviction for similar offence.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
July 4	The Mountain Ash and Aberdare Valley Bottling Co., Limited, aerated water manufacturers, Mountain Ash.	W. N. North, Esq. (Stipendiary), and R.H. Rhys, Esq., County Sessions, Aberdare.	Employing a male child without the prescribed certificate of fitness.	1 0 0	0 8 0	
"	" "	" "	Employing the same child on full time during a period of three weeks.	0 10 0	0 8 0	
" 7	The Dynevor Spelter Works Co., Ld., spelter manufacturers, Dynevor.	J. H. Rowlands and W. Leyson, Esqs., County Sessions, Neath.	Neglecting to send notice to an inspector within one month of beginning to occupy a factory.	0 10 0	0 7 6	
" 11	The Caerphilly Coal Co., Limited, Van Brick Works, Caerphilly.	Dr. John Llewellyn and Ivor Williams, Esq., County Sessions, Caerphilly.	Neglecting to fence crank of steam engine and fly-wheel.	1 0 0	0 7 0	
"	" "	" "	Employing a young person for 10 months without being registered.	0 10 0	0 7 0	
"	" "	" "	Employing the same young person without the prescribed certificate of fitness.	0 10 0	0 7 0	
"	C. Lawrence, Railway Foundry, Caerphilly.	" "	Employing a young person for five months without being registered.	0 10 0	0 8 0	
"	" "	" "	Employing the same young person without the prescribed certificate of fitness.	0 10 0	0 8 0	
" 24	Charles Collier, steam bakery, 145, Commercial Road, Newport, Mon.	R. G. Martyn, T. P. Wansborough, and J. W. Jones, Esqs., Newport Borough Sessions.	Employing a young person for six months without the prescribed certificate of fitness.	0 10 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
July 24	Charles Collier, steam bakery, 145, Commercial Road, Newport, Mon.	R. G. Martyn, T. P Wansborough, and J. W. Jones, Esqs., Newport Borough Sessions.	Neglecting to affix Abstract of the Act in his factory.	0 10 0	0 8 0	
"	Wm. Kirkby, forage mill, Newport.	" "	Neglecting to affix Abstract of the Act in his factory.	0 10 0	0 8 0	
"	" "	" "	Neglecting to fence engine fly-wheel and gearing.	0 10 0	0 8 0	
"	R. H. John, printer, 5, Llanarth Street, Newport.	" "	Employing a child for five weeks otherwise than on the half-time system.	- -	0 5 0	Mulcted in costs only.
"	The Welsh House Fuel Co., (Richards and Hopkins), patent fuel works, Newport, Mon.	" "	Neglecting to send notice within one month of beginning to occupy a factory.	0 5 0	0 8 0	
" 18	Sharpley and Pritchard, dress and mantle makers, Queen Street, Cardiff.	T. W. Lewis, Esq., Stipendiary, Cardiff Borough Sessions.	Employing five women and one female young person at 10.30 p.m. on Saturday.	- -	- -	Adjourned by order of the Court to the 25th July 1893.
" 25	" "	" "	" "	18 0 0	0 19 6	The partners had been previously convicted of a similar offence.
" 26	H. W. and Jas. Hansard, Mineral Water Factory, Llanelly.	Jas. Buckley, and Saml. Bevan, Esqs., County Sessions, Llanelly.	Neglecting to send notice to H.M. Inspector of an accident which occurred at their factory on 17th June 1893.	0 5 0	0 8 0	
"	" "	" "	Employing a woman at 2.45 p.m., on Saturday.	0 5 0	0 8 0	
Aug. 1	John Davies, weaver, Gwargate, Lampeter.	Sir Jas. Drummond, Bart., and H. Peel, Esq., County Sessions, Llansawel.	Failing to affix the Abstract of the Act in his workshop.	0 1 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
Aug. 14	Wm. Morris, dress and mantle manufacturer, Cleddaw House, Haverfordwest.	J. James, (Mayor), and W. P. Ormond, Esqs., Borough Sessions, Haverfordwest.	Neglecting to give notice within one month after he began to occupy a workshop.	- -	0 6 0	Being the first case under section 75 heard in this court. Bench mulcted defendant in the costs only.
„ 25	G. W. Thompson Hawks, Wear Engineering Works, Newport, Monmouthshire.	Henry Phillips, and J. C. Sanders, Esqs., Borough Sessions, Newport.	Employing a young person for six months without the prescribed certificate of fitness.	0 10 0	0 8 0	
„	Joseph S. Kerslake, Portland Flour Mills, Newport, Monmouthshire.	„ „	Employing a young person for six months without the prescribed certificate of fitness.	0 10 0	0 8 0	
„	„ „	„ „	Neglecting to fence fly-wheel and crank of 25-horse power steam engine.	2 0 0	0 12 0	Occupier had been previously cautioned and written to.
„ 26	Henry White & Co., Pontymister Foundry, Risca.	Ebenezer Lewis, and T. Pugsley, Esqs., County Sessions, Newport, Monmouthshire.	Employing three young persons for 12, 12, and 7 months, respectively, without the prescribed certificates of fitness.	1 11 6	1 2 6	
„	Philip S. Phillips, Steel and Tin Plate Works, Pontymister.	„ „	Employing two young persons without the prescribed certificate of fitness.	1 0 0	0 15 0	Offence discovered during the night.
„	„ „	„ „	Employing one male young person more than six nights in two weeks.	1 0 0	0 7 6	
„	„ „	„ „	Employing a woman at 10.20 p.m., on Monday.	2 0 0	0 7 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
Aug. 28	Emanuel Thomas, "Niagara" Mineral Water Works, Swansea.	J. C. Fowler (Stipendiary), and L. Tulloch, Esqs., Borough Sessions, Swansea.	Employing a young person on Sunday	1 1 6	0 8 6	
"	" "	" "	Employing the same young person without the prescribed certificate of fitness.	1 1 6	0 8 6	
"	Chas. Lambert & Co., Copper Works, Port Tennant.	" "	Neglecting to fence mill-gearing in electrical department, which indirectly led to a fatal accident.	9 11 6	0 8 6	Manager had been previously cautioned.
"	Samuel Miles, "Britannia" Whiting Works, Swansea.	" "	Neglecting to give notice of having commenced to occupy a factory.	2 1 6	0 8 6	
Oct. 3	The Aberdare Works and Collieries Co., Abernant Brick Works, near Aberdare.	W. N. North (Stipendiary), and R. H. Rhys, Esqs., Aberdare County Sessions.	Employing three women and one female young person at 2.55 p.m. on Saturday.	1 0	0 6 0	Manager had been cautioned on a previous visit.
" 5	Wm. Hy. Gould, brass and iron founder, Barry Dock.	O. H. Jones and Llewellyn Wood, Esqs., Barry Dock County Sessions.	Employing a young person for 14 months without a certificate of fitness.	1 0 0	0 7 0	
"	J. Roberts & Co., saw mill, Barry Dock.	" "	Employing a young person for six months without a certificate of fitness.	1 0 0	0 7 0	
"	F. E. Aitken, saw mill, Barry Dock.	" "	Employing a young person for 12 months without a certificate of fitness.	1 0 0	0 7 0	
"	Thos. Dawson, brass and tinware manufacturer, Barry Dock.	" "	Neglecting to affix the Abstract of the Act in his factory.	0 10 0	0 7 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Swansea District*—cont.	£ s. d.	£ s. d.	
Oct. 6	Benjn. Jackson, tool handle works, Llandovery.	John Bishop, Capt. Jefferys, and E. J. Lloyd, Esqs., County Sessions, Llandovery.	Neglecting to fence the fly-wheel of a steam engine.	0 2 0	0 8 0	
1892.			*In the Peterborough District.*			
Nov. 9	Miss S. Furniss, boot-upper closer, Kettering.	Dr. Wroughton, and H. J. Sartoris, Esq., Police Court, Kettering.	Employing a child before and after one o'clock on same day.	0 1 0	0 11 6	Miss Furniss had been deceived by the parents, so I asked for a small penalty.
"	Herbert Mobbs, finisher, Kettering.	" "	Parent of the above child illegally employed -	0 5 0	0 6 0	The child is only 11, and not passed 3rd Standard. The parents took her away from school, and told the school-master and School Board officer that the child was going to live in London, whereas they sent her to work full time in Kettering; consequently a heavier penalty was inflicted on the father.
Dec. 7	The Kettering Mineral Water Co., Limited, Bridewell Lane, Kettering.	Dr. Wroughton. H. Sartoris, and J. Stockburn, Esqs., Police Court, Kettering.	Neglecting to affix Abstract of Act - -	- -	0 6 0	This factory has been open 12 months and not reported to inspector, so a case was taken for not affixing Abstract. First prosecution of the kind in Kettering, and the Bench thought that if the Press would make the matter known payment of costs would be sufficient penalty.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Peterborough District*—cont.	£ s. d.	£ s. d.	
Dec. 9	H. Hobbs, riveter, Rushden	Spencer Pratt (Chairman), N. P. Sharman, and J. Hill, Esqs., Police Court, Wellingboro'.	Employing a child not qualified by bye-law of school board to work half time.	0 1 0	0 10 6	As the parent was more to blame than the employer I asked that only a small fine might be inflicted.
"	Arthur Knight	" "	Parent of the child illegally employed by H. Hobbs.	0 5 0	0 7 0	This man had been previously fined on a school board summons.
"	G. Betts, finisher, Irthlingboro'.	" "	Employing his own child who had not attended five times the previous week.	0 2 6	0 8 0	This man had been cautioned by me last year.
"	John Perkins, boot-upper closer, Irthlingboro'.	" "	Neglecting to affix Abstract of Act	0 1 0	0 7 0	Opened more than three months and not reported.
"	Owen Partridge, boot-upper closer, Irthlingboro'.	" "	Neglecting to affix Abstract of Act	0 1 0	0 7 0	
1893.						
Jan. 11	D. H. Stott, printer and bookbinder, Cross Street, Peterboro'.	Colonel C. Isham Strong, J. Clifton, (Mayor), F. L. Pratt, Esqs., and others, Sessions House, Hope Road, Peterboro'.	Employing a boy of 15 at 10.30 p.m.	0 10 0	0 9 6	Defence was that it was the boy's birthday, and he had been let off work part of the day, and was making it up voluntarily.
" 16	J. W. Stephenson, Carre Foundry, Sleaford.	John Reeve (Chairman), E. J. Calcraft, N. H. Reeve, H. Smith, Esqs., Sessions House, Market Place, Sleaford.	Employing boy of 15 till 3 p.m. on Saturday	1 0 0	0 3 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Peterborough District—cont.	£ s. d.	£ s. d.	
1893. Jan. 20	Fred. Turland, milliner, Sharp Street, Wellingboro.'	N. P. Sharman, C. J. K. Wolston, J. J. Hill, Esqs., and Dr. Crewe, Police Court, Wellingboro'.	Neglecting to affix Abstract of Act	[illegible] 2 6	[illegible] 7 0	Had been opened six months, and not reported to inspector.
" 25	G. H. Jones, boot and shoe manufacturer, Newland Works, Kettering.	Dr. Wroughton and J. Stockburn, Esq., Police Court, Kettering.	Neglecting to affix Abstract	0 5 0	0 7 0	
"	" "	" "	Neglecting to fence fly-wheel	0 10 0	0 7 0	
Feb. 8	Adams and Beale, trade sewers, Wellington Street, Kettering.	" "	Neglecting to affix Abstract	0 5 0	0 7 0	
"	" "	" "	Neglecting to fence fly-wheel of gas engine	0 10 0	0 7 0	
" 13	Astell Bros., saw mill, Bedford.	F. A. Blades (Mayor), C. E. Cutliffe, R. B. Stafford, W. H. Jackson, Esqs., Police Court, Bedford.	Not affixing prescribed Abstract of Act	[illegible] 1 0	0 11 0	
"	" "	" "	Having failed to report a fatal accident	-	-	Dismissed. The Act does not say that the occupier must report an accident, and the Coroner had reported it to me. The costs were 11*s.* 6*d.*, of which 2*s.* were paid by the defendants and 9*s.* 6*d.* by me.
"	" "	" "	Neglecting to fence mill gearing	0 5 0	1 0 0	Defence was that the mill-gearing was below the floor, and that no one had to go there when engine is in motion.
Mar. 8	Ellis and Everard, saw mill, Station Yard, Kettering.	Dr. Wroughton, J. Stockburn, and J. J. Willows, Esqs., Police Court, Kettering.	Neglecting to affix Abstract of Act	[illegible] 5 [illegible]	0 [illegible] 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Peterborough District*—cont.	£ s. d.	£ s. d.	
Mar. 8	Robert Grant, boot-upper closer, Kettering.	Dr. Wroughton, J. Stockburn, and J. J. Willows, Esqs., Police Court, Kettering.	Neglecting to affix Abstract of Act - -	0 5 0	0 6 0	
"	John Worley, boot finisher, Broadway, Kettering.	" "	Neglecting to affix Abstract of Act - -	0 5 0	0 6 0	
"	J. C. Neale, Station Road, Kettering.	" "	Neglecting to fence fly-wheel and mill-gearing	1 0 0	0 6 0	
"	" "	" "	Not keeping register with prescribed particulars of a young person.	0 1 0	0 6 0	
" 22	G. H. Jones, Newland Works, Kettering.	Dr. Wroughton (Chairman), J. Stockburn, H. Sartoris, J. J. Willows, and F. Gotch, Esqs., Police Court, Kettering.	Obstructing the inspector in the discharge of his duties; employing children overtime.	- -	- -	Adjourned for a fortnight at the request of defendant's solicitor.
"	The Kettering Boot and Shoe Manufacturing Co., Albert Street, Kettering.	" "	Neglecting to fence fly-wheel of gas engine -	0 10 0	0 5 6	
"	F. T. and Geo. Allen, trade sewers, Albert Street, Kettering.	" "	Neglecting to fence fly-wheel of gas engine -	0 2 6	0 5 6	Not previously visited, and Messrs. Allen had on the day of my visit posted a letter to me applying for an Abstract. I therefore asked for a small fine only.
" 23	A. E. Ward, rope maker, Huntingdon.	The Mayor (F. J. Howson), and Ex-Mayor (C. B. Margetts), Esqs., Town Hall, Huntingdon.	Employing a child of 12 not attending school	0 4 0	0 1 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Peterborough District*—cont.	£ s. d.	£ s. d.	
Mar. 29	John George Marriott, wholesale confectioner, Bridge Street, Peterboro.'	C. T. Strong (Chairman), Hy. Beebee, C. B. Edwards, The Mayor (J. Clifton), Esqs., and others, Court House, Old Gaol, Peterboro'.	Neglecting to affix prescribed Abstract of Act and notice of holidays.	0 10 0	0 8 0	
"	" "	" "	Employing a child not attending school	0 10 0	0 12 6	Child had worked full time for several weeks.
April 1	H. Arnold, saw mill, Luton	The Mayor (A. Huklesby), A. T. Webster, and J. Cumberland, Esqs., Police Court, Luton.	Neglecting to fence fly-wheel of gas engine	0 10 0	0 7 0	
"	Herts, Son & Co., Castle Street, Luton.	" "	Neglecting to fence fly-wheel of gas engine	0 10 0	0 7 0	
"	W. G. Shackleton, straw hat manufacturer, Luton.	" "	Neglecting to affix Abstract or special notices	0 10 0	0 7 0	
" 5	J. H. Jones, boot and shoe manufacturer, Kettering.	Dr. Wroughton (Chairman), J. T. Stockburn, J. J. Willows, Esqs., and Sir W. De Capel Brookes, Bart., Police Court, Kettering.	Obstructing the inspector by endeavouring to prevent two children and one young person appearing before him.	3 0 0	1 19 0 (for both)	Adjourned from 22nd March by request of defendant's solicitor.
"	" "	" "	Employing two childrem of 11 years and one young person overtime.	1 10 0		
"	James Bosworth	" "	Parent of one of the children illegally employed as above.	-	0 2 6	Withdrawn on payment of costs by defendants.
"	Geo. Buckley, 8, Maen Street, Kettering.	" "	Parent of the other child illegally employed as above.	-	0 2 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Peterborough District*—cont.	£ *s.* *d.*	£ *s.* *d.*	
April 5	J. F. Payne, wholesale confectioner, Market Place, Kettering.	Dr. Wroughton (Chairman), J. T. Stockburn, J. J. Willows, Esqs., and Sir W. De Capel Brookes, Bart., Police Court, Kettering.	Neglecting to affix Abstract of Act - -	0 5 0	0 6 0	
„ 22	George Horn, Kempston Flour Mill, near Bedford.	Major F. Higgins, Rev. T. Wyatt, Charles Howard, Esq., and Capt. Newland, Shire Hall, Bedford.	Not affixing prescribed Abstract - - -	- -	- -	Dismissed on the ground that there was no proof that the new prescribed Abstract of Acts, 1878 to 1891, had been posted at the Home Office, or that the fact of there being a new Abstract had been brought to the knowledge of the defendant. Costs, 14*s.*, paid by me.
„	„ „	„ „	Neglecting to fence upright and horizontal shafts, large and small driving belts, &c.	- -	- -	Adjourned for six weeks in order that fencing might be done.
„ 26	Wm. Maddams, straw hat manufacturer, Luton.	The Mayor (A. Hucklesby), and A. T. Webster, Esq., Police Court, Luton.	Not affixing notice of holidays - -	0 2 0	0 8 0	
„	W. J. Shepard, straw hat manufacturer, Luton.	„ „	Not affixing notice of holidays - - -	0 2 0	0 8 0	
„	George Sale, straw hat manufacturer, Luton.	„ „	Employing child not attending any school -	0 5 0	0 7 0	
May 1	James Wilson, bedding manufacturer, St. John Street, Bedford.	G. Hurst (Chairman), W. H. Jackson, G. Robinson, and J. Cutliffe, Esq., and others, Shire Hall, Bedford.	Employing a young person a year-and-a-half without certificate of fitness.	- -	0 7 0	Dismissed. Costs paid by me, 7*s.*

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Peterborough District*—cont.	£ s. d.	£ s. d.	
May 1	James Wilson, bedding manufacturer, St. John Street, Bedford.	G. Hurst (Chairman), W. H. Jackson, G. Robinson, and J. Cutliffe, Esq., and others, Shire Hall, Bedford.	Neglecting to keep register of young person with prescribed particulars.	- -	0 6 6	Case withdrawn.
„ 2	The London Brick Co., Fletton, near Peterborough.	Captain Vipan (Chairman), Rev. R. F. Whistler, Rev. F. Jickling, and Rev. H. H. Wyatt; Norman Cross.	Employing a young person after 6 p.m. -	1 0 0	0 4 0	
„	„ „	„ „	Employing three young persons after 6 p.m. -	} - -	0 11 0	Four cases withdrawn on payment of costs.
„	„ „	„ „	Neglecting to keep Abstract affixed - -			
„ 3	J. Johnson & Co., Hibernian Shoe Works, Kettering.	Dr. Wroughton (Chairman), J. T. Stockburn, T. Willows, Esqs., and Capt. Brook, Police Court, Kettering.	Not fencing fly-wheel of gas engine - -	0 10 0	0 6 0	
4	Richard Smith, flour-miller and maltster, Whittlesea.	C. Crick (Chairman), J. Topham, and A. Whittome, Esqs., Session's Hall, Whittlesea.	Neglecting to affix Abstract of Act - -	- -	0 8 6	Case withdrawn on payment of costs.
„ 17	J. S. Aitken & Co., Langley Iron Works, Luton.	A. Hucklesby (Mayor), A. T. Webster, J. Cumberland, and E. Oakley, and J. Higgins, Esqs., Police Court, Luton.	Failing to affix Abstract of Act - - -	0 3 0	0 7 0	
„	„ „	„ „	Not securely fencing fly-wheel of gas engine -	- -	0 8 0	

Return of Prosecutions—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1893.			*In the Peterborough District*—cont.	£ s. d.	£ s. d.	
June 3	George Horn, flour mill, Kempston, Bedford.	Major F. W. Higgins, Rev. T. W. Wyatt, Capt. Verey, and W. G. H. Horton, Esq., Shire Hall, Bedford.	Neglecting to fence shafts and driving-belts -	- -	0 7 0	This case was adjourned for six weeks, from 22nd April, in order that defendant might do the fencing. This having now been well done, I withdrew the charge, on costs being paid by the defendant.
Sept. 13	Douglas Morton Spong, letter-press printer, High Street, Biggleswade, Beds.	Sir Salisbury Payne, Colonel Stewart, and full Bench of Magistrates, Biggleswade Petty Sessions.	Employing a young person before the hour of 7 a.m. on July 31st, 1893.	0 10 0	0 15 0	
"	" "	" "	Employing a young person before the hour of 7 a.m. on August 2nd, 1893.	0 10 0	0 15 0	
" 28	James Sharp, aërated water manufacturer, St. Neots.	G. F. Rowley (Chairman), J. Abington, Captain W. Duncombe, and R. S. Towgood, Esqs., Police Court, St. Neots.	Employing a young person after 2 p.m. on a Saturday.	0 1 0	0 3 0	Defendant said that he only employed the boy 48 or 50 hours a week, and the Chairman said that though it was the wrong time of day, defendant had evidently meant no harm.
Oct. 25	Hucklesby and West, machinists, Luton.	A. J. Webster, J. Carruthers, Esqs., and others, Police Court, Luton.	Neglecting to affix Abstract at entrance of factory.	0 3 0	0 7 0	
1892.			*In the Norwich District.*			
Nov. 3	George Flick, dressmaker, Leiston.	Captain G. T. Price, R.N., and J. Scrivener, Esq., Saxmundham.	Not affixing Abstract in workshop - -	0 1 0	0 5 6	
"	F. Hammond, tailor, Leiston -	" "	Not affixing Abstract in workshop - -	0 2 6	0 5 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Norwich District*—cont.	£ s. d.	£ s. d.	
Nov. 9	Box & Co., 7, South Quay, Great Yarmouth.	F. Burton (Mayor) and J. Sutton, Esqs., Great Yarmouth Town Hall.	Not affixing Abstract in workshop - -	- -	0 6 6	Plaintiff promised to affix Abstract, and Magistrates ordered him to pay the costs, no fine being asked for.
" 19	Augustus Robert Roe, miller, Framlingham.	J. T. Chevallier, Esq., and Rev. R. Gorton, Framlingham.	Employing a young person without a certificate of fitness.	0 2 6	0 11 6	First case in district. Defendant said a mill was not a factory (wind and steam), also that boy was not employed. Bench were for some time doubtful.
1893.						
Jan. 31	Henry Lake, manager for P. Haldinstein & Co., box makers.	F. W. Harmer and E. N. Wild, Esqs., Norwich.	Employing a child without a certificate of school attendance.	0 1 0	0 8 6	The firm wrote a very proper letter. In consequence, under the discretion given me, I recommended a mitigated penalty. The child had passed Standard V.
Feb. 8	English Bros., steam sawing, Wisbech.	Wm. Groome and John Leach, Esqs., Wisbech.	Employing a young person without a certificate of fitness.	0 10 0	0 13 0	
" 16	Eliza Eustace, tailoress (contractor) for Moses & Co.	G. Benham (Mayor) and J. Francis, Esqs., Colchester.	Not affixing Abstract in her workshop - -	0 10 0	0 13 0	The Chairman said that he hoped this case would be reported in the local Press. There are a very large number of people employed in this industry in and near Colchester, and often at very low wages.
" 21	W. W. Kett, furrier, Norwich	J. D. Smith and E. R. Wild, Esqs., Norwich.	Not affixing Abstract in workshop - -	0 1 0	0 6 0	Chairman said heavier penalties would be imposed in future cases.
Mar. 2	George Death, tailor, Priory Street, Colchester.	Gurney Benham and J. A. Francis, Esqs., Colchester.	Not affixing Abstract in his workshop - -	0 10 0	0 10 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Norwich District*—cont.	£ s. d.	£ s. d.	
Mar. 2	Mrs. Jane Wilson, tailoress, Priory Street, Colchester.	Gurney Benham and J. A. Francis, Esqs., Colchester.	Not affixing Abstract in her workshop - -	0 2 6	0 10 0	
" 21	The British Gas Light Co., Limited, Norwich.	E. K. Harvey and John Boyce, Esqs., Norwich.	Neglecting to fence the fly-wheel of steam engine.	1 0 0	0 10 0	
" 30	A. W. Redding & Co., steam saw mills, Cambridge.	C. J. Clay, Esq., and Dr. E. Cooper, Cambridge.	Neglecting to give notice of an accident to H.M. Inspector, and to the certifying surgeon.	1 0 0	1 11 6	Chairman said the case was an important one.
Apr. 6	G. W. Mallinson & Co., Limited, aërated water manufacturers, William's Walk, Colchester.	W. Gurney Berham, Mayor, and H. Freeman, Esqs., Colchester.	Neglecting to fence dangerous fly-wheel -	- -	0 11 6	This case was adjourned from the sessions of March 23rd, when defendant stated that he would fence to my satisfaction, and on that footing the Bench proposed an adjournment. I have since visited the works and find that fly-wheel, &c., *are now securely fenced*, and the Bench ordered the defendant to pay the costs.
"	Annie Fenning, tailoress, 11, George Street, Colchester.	" "	Not having Abstract affixed in her workshop	0 2 6	0 11 6	
" 11	Dunton and Kidd, letterpress printers, Julian Street, Norwich.	F. W. Harmer, and J. Newman, Esqs., Norwich.	Employing a young person, aged 14, without a certificate of fitness.	0 10 0	0 6 6	
" 24	Henry Green, letterpress printer, King Street, Thetford.	Major Marsham and A. Jillings, Esq., Thetford.	Neglecting to fence fly-wheel of gas engine -	0 10 0	0 10 0	The Chairman said "The penalty is 1*l*., inclusive of costs."
" 28	The Melford Binder Twine Co., Long Melford Flax Mills.	Colonel Barnardiston and Gascoyne Beven, Esq., Long Melford.	Employing a young person without a certificate of fitness.	0 10 0	0 5 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Norwich District*—cont.	£ s. d.	£ s. d.	
Apr. 28	David Ward, iron founder, Long Melford.	Colonel Barnardiston and Gascoyne Beven, Esq., Long Melford.	Employing a child without a certificate of fitness.	0 10 0	0 5 0	
May 8	Ronald Smith, letterpress printer, Haverhill.	D. Gurteen and J. Marshall, Esqs., Haverhill.	Neglecting to limewash his printing office for more than 14 months.	- -	0 6 0	The defendant having limewashed the office, and being satisfied that he had given orders for limewashing before he received the summons I withdrew the charge, the defendant paying costs.
" 11	The Britannia Ironworks Co., St. Botolph's, Colchester.	J. Buck, Esq., and Alderman Green, Colchester.	Neglecting to fence the bevilled wheels of a drilling machine.	2 0 [illegible]	0 8 [illegible]	
June 1	Redit and Brooke, engineers, Bury.	H. Ridley and J. Cornish, Esqs., Bury St. Edmund's.	Neglecting to fence fly-wheel of steam-engine	1 0 0	0 8 [illegible]	
"	The Bury Free Press Co., Limited, Bury.	" "	Employing two young persons without certificates of fitness.	0 1 0	0 12 0	Fined in one case; costs only in the other.
July 10	Offwood Bendall, iron founder, Manningtree,	The Rev. C. Norman and Colonel Martin, Mistley.	Employing a young person without a certificate of fitness.	0 5 0	0 9 6	
"	" "	" "	Neglecting to fence fly-wheel and crank of steam-engine.	0 10 0	0 17 6	
" 21	Jonathan Palmer, letterpress printer.	The Mayor and J. Campkin, Esq., Cambridge.	Employing a child without a certificate of fitness.	0 5 0	0 6 0	A solicitor appeared for defendant, who contended that the boy was an "errand boy." I did not ask for a heavy penalty, but urged the Bench to convict; and I pointed out that the "errand boy" plea was often made, and led to a great deal of illegal employment, as in this case.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Norwich District*—cont.	£ s. d.	£ s. d.	
July 22	W. Gaul & Co., rope makers, Shelford.	Professor T. C. Allbutt and C. E. Ivatt, Esq., Cambridge.	Employing a child without a certificate of school attendance.	0 5 0	0 6 6	
" 27	Misses A. and E. Garnham, dressmakers, 11, High Street, Ipswich.	The Mayor and J. Wrinch, Esq., Ipswich.	Neglecting to affix Abstract in workshop	1 0 0	0 16 6	
"	Frederic Corder, Tavern Street, Ipswich.	" "	Neglecting to affix notice with particulars of overtime in workroom (section 14, Factory and Workshops Act, 1891).	0 10 0	1 1 6	
Aug. 1	W. J. Aspinall, letterpress printer.	John Richardson Fryer and John Nix, Esqs., Chatteris.	Not keeping any register	0 5 0	0 6 6	One of the Magistrates (Mr. J. R. Fryer), conducted the business of the court in a very strange manner. I had attended the sessions (as instructed) to apply for summonses, which I did, whereupon, Mr. Fryer ordered the defendant to be sent for, and said he should hear the case at once. I said that no summons had been issued, but he said that he had power to decide the matter at once, to which I thought it wise not to object, and I argued the case at length, Mr. Fryer taking the most frivolous objections, but finally the clerk and the other J.P. overruled him, and a conviction was recorded. There has never been a prosecution under the Factory and Workshops Act here before; there are 10 factories and a number of workshops. The case lasted nearly three hours.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Norwich District*—cont.	£ s. d.	£ s. d.	
Aug. 30	Frederic Wenn - -	The Mayor and W. Sutton, Esq., Great Yarmouth.	Employing a young person without a certificate of fitness.	0 2 6	0 9 0	
Sept. 2	Alexander Pearse, Roller Flour Mills, Great Shelford, Cambs.	Rev. B. Latham and H. Neville, Esq., Cambridge.	Neglecting to fence mill-gearing, whereby grievous bodily injury was done to a young person, *i.e.*, his son, E. A. Pearse.	- -	- -	The Magistrates adjourned the case till this day six months, the counsel who appeared for defendant said that it would take six months to make the structural alterations, which would be necessary in the building, to secure safety. In the interval they suggested that I should confer with defendant as to fencing required, and, as it was more important that the fencing should be done than that the defendant should be fined (the injured person being his son), I agreed to this course.
Oct. 5	W. Brown & Co., steam saw mill, Friar's Road, Ipswich.	The Mayor and A. Wrench, Esq., Ipswich.	Neglecting to affix Abstract in factory - -	0 10 6	0 9 0	
„ 16	Barber and Collins, builders, Downham Market.	F. Pratt, Esq., and Col. Stock, Downham.	Employing a young person after 2 p.m. on Saturday, *i.e.*, till 4 p.m.	0 10 0	0 10 0	
„ 26	The Eagle Brewery Co., Colchester.	J. C. Sandars and E. Green, Esqs., Colchester.	Neglecting to send notice of an accident (fatal) to H.M. Inspector and to the certifying surgeon of the district.	1 0 0	1 1 6	
1892.			*In the East Metropolitan District.*			
Dec. 28	James Hicks & Co., dressmakers, 239, Mile End Road, E.	Frederick Mead, Esq., Stipendiary, Thames Police Court.	Employing three females after 4 p.m. on Saturday, 3rd December.	2 9 6	0 16 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the East Metropolitan District*—cont.	£ s. d.	£ s. d.	
Jan. 4	C. Webster & Co., steam frame-moulding and saw mills, 10 and 14, Sewardstone Road, N.E.	John Rose, Esq., Stipendiary, Worship Street Police Court.	Neglecting to keep register in the prescribed form.	1 0 0	0 2 0	Firm cautioned on a former occasion for similar offences.
"	" "	" "	Employing three young persons and one child without certificates of fitness.	2 0 0	1 6 6	
" 11	J. Brown, Vyner Saw Mills, Vyner Street, Cambridge Heath.	H. J. Bushby, Esq., Stipendiary, Worship Street Police Court.	Not reporting accident which occurred to said child.	5 0 0	0 2 0	Defendant had been specially cautioned on a former occasion with respect to the punctual obtaining of certificates of fitness.
"	" "	" "	Employing a child and a male young person without certificates of fitness.	2 0 0	1 0 0	
May 3	Thomas Smith & Co., Limited, Emmett Street Foundry, Poplar.	Fredk. Mead, Esq., Stipendiary, Thames Police Court.	1. Failing to keep register of young persons -	1 0 0	0 2 0	
"	" "	" "	2. Employing a young person without certificate of fitness.	1 8 0	0 4 0	
June 17	Samuel Cutforth, dressmaker, Woodford Green, Woodford.	J. F. Buxton and W. B. Whittingham, Esqs., Stratford.	Employing two women after 4 p.m. on Saturday, *i.e.*, until 7 p.m.	2 0 0	0 19 0	
" 21	Marie Craig, dressmaker, 52, Alexandra Street, Southend-on-Sea.	T. Dowsett, C. A. Tabor, Esqs., and others, Southend.	1. Employing one young person and two women until 12 midnight, on May 15th.	0 2 6	1 10 6	
"	" "	" "	2. Employing the same until 11 p.m., on May 16th.	0 2 6	0 12 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the East Metropolitan District—cont.	£ s. d.	£ s. d.	
1893.						
July 12	George Steels, under-foreman at Messrs. S. H. Johnson & Co., engineers, Carpenter's Road, Stratford.	Ernest Bagallay, Esq., Stipendiary, Stratford.	Employing a young person on Sunday, June 11.	0 10 0	0 10 0	
" 19	James Andrew Curle, glass works, Homer Road, Hackney.	J. R. W. Bros, Esq., Stipendiary, North London Police Court.	Employing a child without attending school -	0 10 0	0 4 7	
Oct. 20	Samuel Cutler and Sons, Providence Iron Works, Millwall.	John Dickinson, Esq., Stipendiary, Thames Police Court.	Employing a young person after 6 p.m. -	0 10 0	0 2 0	
			In the Central Metropolitan District.			
1892.						
Nov. 1	Theodore Lavenbein, mantle maker, 14, Charterhouse Buildings, E.C.	Horace Smith, Esq., Clerkenwel Police Court.	For having, on Saturday, 1st October, employed seven females after the hour of 4 p.m., to wit, until 5 p.m.	1 10 0	1 4 0	The Magistrate said he believed they had all been at work after 4 p.m., but one woman (Emily Bryant) swore she was only waiting for another woman, so that he could only convict in the six other cases. The women all said they had been having tea, and we could only swear to seeing three of them at work.
"	Crowhurst & Co., box manufacturers, Lamb's Buildings, Bunhill Road.	" "	Having on Wednesday and Thursday, 5th and 6th days of October last, employed two females with many others, overtime without conforming to section 66 of Act, 1878, and section 14 of Act of 1891.	2 0 0	0 12 0	
" 21	The Misses Turner and Tucker, Triangle, East Barnet.	H. E. C. Stapylton, Esq., and Col. Trotter, Town Hall, High Barnet.	Having employed four females on Saturday, 15th October, after 4 p.m., to wit, till 4.45 p.m.	0 8 0	1 14 0	Heavy penalties were not asked for, on promise of future compliance.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Central Metropolitan District*—cont.	£ s. d.	£ s. d.	
Nov. 24	Geo. H. Newton, firewood dealer, 7, Old Nichol Street, Shoreditch.	— Rose, Esq., Worship Street Police Court.	Having neglected to fence fly-wheel, engine, and driving straps.	0 5 0	0 2 0	Defendant gave me a guarantee that he would not run the engine any more, therefore, I accepted a nominal fine.
Dec. 8	Jones and Adams, piano-action makers, Rochford Road, Gospel Oak.	— De Rutzen, Esq., Marylebone.	For having employed four young persons, under the age of 16 years, for a period exceeding seven days without certificates of fitness.	1 0 0	0 16 0	
„ 9	Saml. Green, tailor, 73, Mansell Street.	H. Dickenson, Esq., Thames Police Court.	Having employed a female up to the hour of 9.20 p.m. without conforming to the provisions of section 66 of Act of 1878, and section 14 of Act of 1891.	3 0 0	0 4 0	Three other females at work on floor below, who ran off whilst inspectors went to room above.
Dec. 30	Rigby, Batcock & Co., brush makers, Bethnal Green Road, E.	H. J. Bushby, Esq., Worship Street.	Employing four young persons for a period exceeding seven days, to wit, for from four to five months, without having obtained certificates of fitness.	8 0 0	0 16 0	
„	O. Barnes, bookbinder, 22, New Inn Yard, Shoreditch, E.C.	„ „	Employing three young persons for a period exceeding seven days, to wit, for from three to four weeks, without having obtained certificates of fitness.	0 10 0	0 12 0	Mr. Bushby considered that as one of these young persons was partly errand boy and was not at work for long, the costs in this case would be sufficient, and 5*s.* in each of the other two cases.
„	„ „	„ „	For failing to limewash the whole of the factory within 14 months from the date of last limewashing.	2 0 0	0 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Central Metropolitan District*—cont.	£ s. d.	£ s. d.	
Feb. 4	Smith, Son, and Gowland -	Alderman Tyler, Mansion House.	Having neglected to limewash their factory for four years, after warnings and written cautions.	5 0 0	0 2 0	
„ 24	Drapkin and Millhoff, cigar manufacturers, 24, Aldgate.	Alderman Davies, Guildhall -	Having neglected to limewash their factory for two years.	10 0 0	0 2 0	It was shown that in February 1891 they were two years in arrear, when notice was served upon them.
„	Geo. Tayler, picture-frame maker, 8 and 9, Mitre Street, Aldgate.	„ „	Having neglected to report an accident which caused bodily injury to a workman, and which was caused by machinery in motion driven by motor power.	1 0 0	0 5 0	
„	George Berdh, cap manufacturer, Middle Street, Cloth Fair.	„ „	Having neglected to give notice of beginning to occupy a workshop.	0 10 0	0 3 0	
„	„ „	„ „	Having neglected to affix in his workshop the prescribed Abstract of the Act.	0 10 0	0 3 0	
„	„ „	„ „	Having employed a child without certificates of school attendances.	2 0 0	0 3 0	
„	Joseph Berryman, bookbinder, 10, Aldgate Avenue.	Alderman Davies, Guildhall -	Having neglected to give notice of his beginning to occupy this factory.	0 5 0	0 3 0	
„	„ „	„ „	Having neglected to affix in his factory the prescribed copy of Abstract of Act.	0 5 0	0 3 0	
„	„ „	„ „	Having neglected to keep a register of children and young persons.	0 5 0	0 3 0	

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Central Metropolitan District—cont.			
1893.				£ s. d.	£ s. d.	
Feb. 24	Joseph Berryman, bookbinder, 10, Aldgate Avenue.	Alderman Davies, Guildhall -	Having employed a child for full time who produced no school qualifications.	2 0 0	0 3 0	
"	" "	" "	Having employed a young person without a certificate of fitness.	1 0 0	0 4 0	
Mar. 7, remanded to Mar. 21.	George Cartwright, sawyer, 28, Hearn Street, Curtain Road, E.	J. Rose, Esq., Worship Street Police Court.	Neglecting to fence the pulleys and driving band of a saw bench, after repeated instructions to do so.	1 0 0	0 2 0	Remanded at first hearing to allow defendant an opportunity of carrying out in full the work which he had attempted in the interval between the issue of summons and date of hearing.
" 23	Perrin and Sons, retail bakers, 151, Hackney Road.	H. Jeffreys Bushby, Esq., Worship Street Police Court.	Having employed a young person, under the age of 16 years, before the hour of 5 a.m., to wit, at 4 a.m.	2 0 0	0 4 0	
"	Harris Lebus, cabinet manufacturer, 70/2, Tabernacle Street.	" "	Having neglected to give notice of an accident, caused by machinery in motion.	5 0 0	0 4 0	Instructed a year ago upon this duty.
"	" "	" "	Having neglected to affix an Abstract of the Acts in his factory.	1 0 0	0 2 0	
"	" "	" "	Having neglected to keep a register of young persons in the prescribed form.	1 0 0	0 2 0	
"	" "	" "	Having employed five young persons, for months, without certificates of fitness, after warnings hereon.	5 0 0	1 0 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Central Metropolitan District*—cont.	£ s. d.	£ s. d.	
Mar. 27	Kopelansky & Co., 20, Wake Street, Aldgate.	Alderman Ritchie, Guildhall, London.	Employing six young persons under the age of 16 years for periods varying from five weeks to 15 months, without having previously obtained certificates of fitness for employment from the surgeon, and after having been cautioned by Mr. Lakeman with reference to this matter upon a former visit.	3 0 0	1 10 0	
April 24	R. Stevenson, embroidery, 10, Charterhouse Buildings, Goswell Road, E.C.	J. R. W. Bros, Esq., Clerkenwell.	Employing one woman and one young person (female) all night on 29th March 1893.	2 10 0	0 4 0	
May 1	Spreckley, White, and Lewis, mantle manufacturers, 20, Chiswell Street, E.C.	J. Rose, Esq., Worship Street	Neglecting to limewash the whole of the factory within 14 months from date of last limewashing, to wit, for three years.	1 0 0	0 2 0	
May 8	Thos. Denne, isinglass, 8/10, Old Swan Lane, E.C.	The Lord Mayor, Mansion House.	Failing to limewash his factory since July 1891.	2 0 0	0 2 0	
" 23	R. Manson, surgical instruments, 75c, Fortess Road, Kentish Town.	W. M. Cooke, Esq., Marylebone Police Court.	For neglecting to send notice of having commenced to occupy a factory.	0 10 0	0 2 0	Case adjourned from 25th April, for the attendance of Mr. Manson.
"	" "	" "	Employing three young persons for a period exceeding seven days, to wit, for four months, without obtaining their certificates of fitness.	1 10 0	0 6 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Central Metropolitan District*—cont.	£ s. d.	£ s. d.	
May 24	Joseph Balby, glass beveller, 149A, High Street, Shoreditch.	John Rose, Esq., Worship Street.	Neglecting to serve notice of having commenced to occupy a factory.	0 10 0	0 4 0	
"	" "	" "	Neglecting to fence a certain part of the mill-gearing, whereby a fatal accident was caused on 25th March 1893.	2 0 0	0 4 0	
" 26	Harmer and Harley, letterpress printers, 220, Upper Thames Street, E.C.	The Lord Mayor, Mansion House.	Not affixing form No. 12 during overtime employment.	0 5 0	0 2 0	
"	" "	" "	Employing three young persons from 8 a.m. to 10 p.m. with only 1½ hours for meals.	0 15 0	0 15 0	
"	" "	" "	Employing the same three young persons after 10 p.m., to wit, until 10.20 p.m.	0 15 0	0 6 0	
June 23	Bradbury, Wilkinson, & Co., Limited, letterpress and bookbinding, 11/12, Little Trinity Lane, E.C.	Alderman Sir J. Savory, Bart., Mansion House.	Employing nine females after 9 p.m. on Friday the 12th, to wit, throughout the night and until 2 p.m. on Saturday the 13th, the work having commenced at 8 a.m. on Friday the 12th, altogether a period of 30 hours.	18 0 0	2 5 0	
"	" "	" "	Employing the same nine females before 6 a.m. on Monday the 22nd (Whit Monday), to wit, from 12 o'clock midnight until 8 a.m.	9 0 0	0 18 0	
July 5	J. Sloper & Co., engineers, West Hampstead.	W. M. Cooke, Esq., Marylebone Police Court.	Neglecting to limewash the factory since 1891	0 10 0	0 2 0	
"	" "	" "	Employing three young persons under the age of 16 years for a period exceeding seven days without certificates of fitness.	1 10 0	0 12 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Central Metropolitan District*—cont.	£ s. d.	£ s. d.	
Aug. 15	Brown and Rowley, letterpress printers, bookbinders, &c., 13, Garlick Hill, E.C.	Mr. Alderman Davis, Mansion House.	Employing three women after 4 p.m. on Saturday, June 24th.	0 7 6	0 15 0	
"	" "	" "	Employing three women after 4 p.m. on Saturday, July 15th.	0 7 6	0 15 0	
Oct. 31	William Ferris, cabinet maker, 244, Hackney Road, E.	John Ross, Esq., Worship Street Police Court.	Employing two female young persons after 8 p.m.	0 10 0	0 8 0	Defendant pleaded extreme poverty, and the cases were not pressed. Stipendiary agreed that a small penalty would suffice.
1892.			*In the West Metropolitan District.*			
Dec. 13	Robson and Sons, Limited, letterpress printers, Fetter Lane, E.C.	———, Mansion House Justice Room.	Employing one young person and three women after 4 p.m. on Saturday.	- -	3 19 0	Owing to an error, no prosecutor appeared, and cases were dismissed.
" 14	Pollard and Barton, jewel case makers, 13, Poland Street, W.	James Hannay, Esq., Marlborough Police Court.	Failing to affix Abstract in workshop - -	0 10 0	0 2 0	
"	Hawker and Son, letterpress printers, 26, Poland Street.	" "	Failing to limewash part of factory within 14 months.	1 0 0	0 2 0	
" 15	Misses Pepper and Northam, dressmakers, 10, Thayer Street, W.	W. M. Cooke, Esq., Police Magistrate, Marylebone Police Court.	Employing two women after 4 p.m. on Saturday.	0 10 0	0 10 0	
"	Henderson and Spalding, music printers, 3, Marylebone Lane, W.	" "	Employing five young persons after 4 p.m. on Saturday.	1 5 0	1 5 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the West Metropolitan District*—cont.	£ s. d.	£ s. d.	
Dec. 17	F. Herink, tailor, 21, Millman Street, W.C.	J. R. Rose, Esq., Clerkenwell Police Court.	Employing two women after 4 p.m. on Saturday.	4 0 0	0 10 0	
"	H. Schellenberg, furrier, 14, St. Peter's Road, Islington, N.	" "	Employing two women after 10 p.m. on 12th October 1892.	2 0 0	0 10 0	
1893.						
Feb. 8	Holder & Co., zinc manufacturers, Smith Square, Westminster, S.W.	James Sheil, Esq., Police Magistrate, Westminster Police Court, S.W.	Employing two young persons for more than seven days without surgical certificates.	1 0 0	0 8 0	
" 9	Cooper and Wraton, printers, 54, Berwick Street, W.	Robert Newton, Esq., Police Magistrate, Marlborough Street, Police Court.	Failing to keep register with prescribed particulars, &c.	1 0 0	0 2 0	
" 10	Saml. Reeves, printer, 13, Caledonian Road, N.	J. Bros, Esq., Clerkenwell Police Court.	Employing two young persons for more than seven days without a certificate of fitness from the certifying surgeon.	0 2 0	0 10 0	
" 15	Mrs. Susan Fox, dressmaker, 40, Brook Street, W.	J. Hannay, Esq., Marlborough Street, Police Court.	Employing one woman and four young persons after the hour of 8 p.m., to wit, at 9 p.m., on 30th January 1893, without reporting overtime to H.M. Inspector.	3 0 0	1 0 0	Full penalty and costs in one case; costs only in the others, on an undertaking being given that the offence should not be repeated.
"	" "	" "	Employing one woman and four young persons after the hour of 8 p.m., to wit, at 9.30 p.m., on 1st February 1893, without reporting overtime to H.M. Inspector.	- -	0 10 0	Costs only, on an undertaking being given that the offence should not be repeated.
" 16	Tucker, George, letterpress printer, Salisbury Court, E.C.	Alderman Vaughan Morgan, Mansion House Justice Room.	Employing three women after 10 p.m., viz. at 12.30 a.m.	0 15 0	0 14 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the West Metropolitan District*—cont.	£ s. d.	£ s. d.	
Feb. 16	Robson and Sons, Limited, letterpress printers, Fetter Lane, E.C.	Alderman Vaughan Morgan, Mansion House Justice Room.	Employing five young persons after 4 p.m. on a Saturday.	0 5 0	1 5 0	
"	Wm. Johnson and Sons, manufacturing stationers, Gough Square, E.C.	" "	1. Keeping factory in an insanitary condition	3 0 0	} 1 15 0	
"	" "	" "	2. Failing to limewash within prescribed time.	3 0 0		
"	" "	" "	3. Employing seven young persons more than 13 work days without obtaining for them certificates of fitness.	1 15 0		
June 17	Maria Ellis, 18, The Mall, Ealing.	G. C. Mackintosh and Montague Sharp, Esqs., Brentford.	Employing 11 females on Saturday, 3rd June 1893, after 4 p.m., to wit, until 5.5 p.m.	5 10 0	3 0 6	
July 19	William Plummer, draper, 89, & 90, High Street, Eton.	H. H. Howard-Vyse, J. Hartoff Nash, Esqs., and others, Petty Sessions Slough.	Employing four females after 4 o'clock on Saturday.	1 0 0	} 5 16 6	
"	" "	" "	Neglecting to send notice of overtime employment to H.M. Inspector before 8 o'clock in the evening of the day on which work was continued overtime.	0 1 0		

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
				£ s. d.	£ s. d.	
1893.			*In the West Metropolitan District*—cont.			
July 19	William Plummer, draper, 89 & 90, High Street, Eton.	H. H. Howard-Vyse, J. Hartoff Nash, Esqs., and others, Petty Sessions, Slough.	Neglecting to enter the prescribed particulars respecting overtime employment on the overtime record exhibited in the work-room.	0 1 0		
„ 31	Henry Odell and Son, Horton, Bridge Brickfields, West Drayton.	Colonel Greville, R. A Masters, and H. A. Harrison, Esqs., Uxbridge County Court.	Employing a child full time, viz., neither on the system of morning and afternoon set, nor on the system of alternate days only.	3 0 0	0 11 0	
„	D. and C. Rutter, brickfield, West Drayton.	„ „	Not entering in the prescribed register the name of a child employed in his factory.	- -	0 6 6	Dismissed owing to conflict of evidence. The man employing the child informed me on my visit that he had the child at work on kiln and firing, but at court said the child only carried beer &c. to the kiln men, from 6 a.m. till mid-day.
„	Henry Knight, brick moulder, Stacey's Cottages, Horton Road, Tiewsley, West Drayton.	„ „	Allowing his son, under eleven years of age to be employed in the above (Rutter's) brickfield.	- -	0 4 0	I withdrew this case owing to above result.
Aug. 1	Sulley and Ford, letter-press printers, Plough Court, Fetter Lane, E.C.	Alderman Samuels, Guildhall, Police Court.	Employing a male young person after 8 p.m., and not sending notice of such overtime nor having overtime notices affixed in their factory.	1 0 0	0 5 0	
„	„ „	„ „	Not keeping a register in the prescribed form and with the prescribed particulars of employment of young persons employed in their factory.	1 0 0	0 5 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the West Metropolitan District*—cont.	£ s. d.	£ s. d.	
Aug. 1	Sulley and Ford, letterpress printers, Plough Court, Fetter Lane, E.C.	Alderman Samuels, Guildhall Police Court.	Employing a young person for more than 13 days without being certified by certifying surgeon of the district.	1 0 0	0 4 0	
„ 2	Robson and Sons, letterpress printers, Rolls Buildings, Fetter Lane, E.C.	Lord Mayor Knill (only), Mansion House Police Court, E.C.	Employing four female young persons after 4 o'clock on Saturday.	4 0 0	1 0 0	
„ 19	Charles Ellingworth, basket manufacturers, Highbridge, Walk, Aylesbury.	H. Cazerove, and J. Bishop, Esqs., Aylesbury.	Employing two young persons before the hour of 6 a.m., to wit, at 5.30 a.m.	- -	- - 1 9 0	Cases dismissed, because, though it was admitted they were at work at 5.30 a.m., it was stated in evidence that the occupier was ignorant of their being at work, and had never ordered them to begin at that hour. They did it on their own account to make up for time wasted on previous day.
„	„ „	„ „	Neglecting to affix Abstract of the Act	- -	- -	Also dismissed, though it was admitted Abstract was not up; occupier had only received it three days before, and therefore Magistrates thought he had sufficient excuse for not getting it affixed.
Sept. 1	Geo. Tucker, letterpress printer, Electrician Printing and Publishing Co., 2/3, Salisbury Court, E.C.	Sir Andrew Lusk, Mansion House.	Employing five women, folding, at 3.50 a.m. on the 25th September.	5 0 0	1 3 0	This is the second conviction against this firm.
189			*In the Bristol District.*			
Nov. 11	Jos. Brown Witebell, boot manufacturer, Keynsham.	J. C. Ireland and J. Cooke Hurle, junr., Esqs., Keynsham.	Not serving notice to an inspector of beginning to occupy a factory.	0 0 6	0 9 6	As he is retiring from business I did not press for a heavy penalty.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bristol District*—cont.	£ s. d.	£ s. d.	
Jan. 13	Coleby and Giles, provender manufacturers, Weymouth Street, Bath.	Alderman Gibbs, (Ex-Mayor), J. S. Turner, Esq., General Burn, J. G. P. Allett, Esq., Guildhall, Bath.	Neglecting to fence the fly-wheel of the gas engine on 17th December 1892.	1 13 6	0 6 6	
Feb. 14	A. G. Perrett, dressmaker, 1, Burton Street, Bath.	J. S. Turner, J. W. B. Cox, Esqs., Bath.	Neglecting to affix the Abstract of the Act in her workshop.	- -	0 5 6	Fined in costs only.
Mar. 17	Isaac Bennett, brick manufacturers, Myrtle Street, Bristol.	Colonel Savile and John Hall, Esq. Bristol.	Employing a young person after two o'clock in the afternoon of Saturday.	0 10 0	0 9 0	
April 7	King, Mendham & Co., electricians, Narrow Wine Street, Bristol.	P. J. Worsley & E. Robinson, Esqs., Bristol.	Employing a young person without certificate of fitness.	1 0 0	0 10 6	
"	The Netham Brick and Tile Co., Netham, near Bristol.	J. C. C. Ireland, Joseph Cooke Hurle, L. Daubeny, Esqs., and Major Edgell, Keynsham.	Not affixing the Abstract - - -	0 1 0	0 9 0	
"	The Netham Brick and Tile Co., Netham, near Bristol.	J. C. C. Ireland, Joseph Cooke Hurle, L. Daubeny, Esqs., and Major Edgell, Keynsham.	Not keeping registers of the young persons employed.	0 5 6	0 4 6	
	" "	" "	Not fencing the steam engine - - -	- -	0 9 0	In addition to paying the costs the defendants were ordered to securely fence the engine within seven days, and in default to pay 1*l.* for each day that it should be left unfenced.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bristol District*—cont.	£ s. d.	£ s. d.	
April 21	George Cook, builder, Canon's Marsh, Bristol.	Alfred Robinson and J. Ford, Esqs., Bristol.	Neglecting to fence the pulleys and bands of two mortar mills.	1 0 0	0 8 0	
" 24	The Fishponds and Badminster Brick and Tile Company, Fishponds, near Bristol.	Francis Tothill and G. H. Pope, Esqs., Lawford's Gate, near Bristol.	Occupiers of a factory in which two young persons were employed after 2 p.m. on Saturday.	-	-	The company, at the hearing of the case, charged two workmen in their employment as being the actual offenders and they were fined.
"	Alexander Ponsford	-	-	0 5 0	0 11 6	
"	Charles Lewis	-	-	0 5 0	0 11 6	
" 25	Henry Hodgkin, occupier, saw mill, Faringdon.	T. L. Goodlake, W. Dundas, Hon. W. B. Barrington, A. Henderson and E. Hanbury, Esqs., Faringdon, Berks.	Employing a child, qualified to work as a young person, from 6 a.m. to 7 p.m. on 22nd March 1893.	0 1 0		
"	" "	" "	Employing a child without a certificate of fitness, for more than seven work days on same date.	0 1 0	1 13 6	This was practically a prosecution for not sending notice of beginning to occupy the factory, and I did not press for heavy penalties.
"	" "	" "	Not affixing the Abstract of the Act	0 1 0		
"	George W. Habgood, draper and milliner, Faringdon.	T. L. Goodlake, W. Dundas, Hon. W. B. Barrington, A. Henderson and E. Hanbury, Esqs., Faringdon, Berks.	Employing a woman after 4 p.m. on Thursday (being the day substituted for Saturday for early closing).	-	0 11 0	Case dismissed, the Magistrates considering that as she was partly employed in serving in the shop, she was not "employed" within the meaning of the Act.
May 11	R. G. Whiting & Co., boot manufacturers, Soundwell, Gloucestershire.	C. W. Cave (Chairman), E. P. Wills, and J. Yalland, Esqs., Lawford's Gate Police Court, Bristol.	Neglecting to affix Abstract	0 10 0	0 8 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bristol District*—cont.	£ s. d.	£ s. d.	
May 11	R. G. Whiting & Co., boot manufacturers, Soundwell, Gloucestershire.	C. W. Cave (Chairman), E. P. Wills, and J. Yalland, Esqs., Lawford's Gate Police Court, Bristol.	Employing two young persons under 16 years of age for four and 10 months respectively, without certificates of fitness for employment.	0 10 0	1 4 0	
„ 12	Thomas Parker, 16, Sherborne Street, St. George, Bristol.	W. W. Jose and J. C. Godwin, Esqs., Bristol.	Allowing his child, aged 12, to work full time at Derham Bros.' boot factory on 13th April.	1 0 0	0 15 0	An attempt was made to pass him off as being 13 by means of a falsified certificate of birth.
„ 18	Great Western Cotton Co., Limited, cotton spinners and weavers, Barton Hill, Bristol.	D. C. A. Cave and John Yalland, Esqs., Lawford's Gate.	Employing a woman until five minutes after 1 o'clock (the dinner-time commencing at 1 o'clock) on 21st April 1893.	0 10 0	7 19 6	This being the first offence and the costs being heavy, I only asked for a penalty in two cases.
„	„ „	„ „	Allowing 16 other women to remain in the room at the same time.			
„ 25	A. F. Moon & Co., shoe manufacturers, Hanham Road, Kingswood, Bristol.	G. F. Chamberlain and Chatwood Aiken, Esqs., Lawford's Gate Police Court, Bristol.	(1.) Not affixing Abstract - - -	0 10 0	0 8 0	
„	„ „	„ „	(2.) Not keeping register of young persons -	0 10 0	0 8 0	
„ 25	„ „	„ „	(3.) Employing a boy under 16 years of age for 12 months without certificate of fitness.	0 5 0	0 10 6	
„	Bridges and Haskins, brickmakers, Mount Hill, Kingswood.	„ „	(1.) Not affixing Abstract - - -	0 10 0	0 8 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bristol District*—cont.	£ s. d.	£ s. d.	
May 25	Bridges and Haskins, brickmakers, Mount Hill, Kingswood.	G. F. Chamberlain and Chatwood Aiken, Esqs., Lawford's Gate Police Court, Bristol.	(2.) Employing two young persons under 16 without certificates of fitness for five and seven weeks respectively.	0 10 0	1 2 0	
"	" "	" "	(3.) Employing Albert Payne as a young person, he being under 14 years of age, and possessed of no educational or attendance certificate.	0 5 0	0 8 6	
"	Alfred Williams, bootmaker, Cerriers' Rank, Hanham Road, Kingswood.	" "	(1.) Failing to send notice of commencement	0 2 6	0 10 6	Defendant pleaded ignorance, and the Magistrates took a lenient view of the cases, so I consented to a conviction in one case, and withdrawal of the others on payment of costs.
"	" "	" "	(2.) Not affixing Abstract - - -	- -	0 4 6	
"	" "	" "	(3.) Employing a child of 12 years of age full time.	- -	0 6 0	
" 29	Edward Thomas, bootmaker, High Street, Bruton, Somerset.	T. E. Rogers (Chairman), W. Bailey Langhorne, Chas. Penruddocke, C. W. Sherston, J. Huntley Thring and —Ducat, Esqs., Petty Sessions, Town Hall, Wincanton.	(1.) Not affixing Abstract - - -	0 2 6	0 6 0	Defendant pleaded ignorance, and this being the first case in the division, the Magistrates took a lenient view. Conviction in two cases, and third case withdrawn on payment of costs.
"	" "	" "	(2.) Employing Joseph Biss, a boy of 13, from 7.10 a.m. to 7.30 p.m. on Saturday, 8th April 1893, no other half-holiday being substituted.	0 2 6	0 6 0	
"	" "	" "	(3.) Employing same Joseph Biss from 7.10 a.m. to 7.20 p.m. on Thursday, 13th April 1893.	- -	0 3 6	
June 14	Jane Parker, dressmaker, 33, Brock Street, Bath.	Sir R. S. Blane, Bart., Major Brickman, Col. Vaughton and Col. Harbord, Bath.	Not reporting overtime made on 19th May 1893, by 8 p.m. on the same evening.	1 0 0	0 11 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bristol District*—cont.	£ s. d.	£ s. d.	
June 14	Jane Parker, dressmaker, 33, Brock Street, Bath.	Sir R. S. Blane, Bart., Major Brickman, Col. Vaughton and Col. Harbord, Bath.	Not reporting overtime made on the 9th, 11th and 12th May.	- -	0 12 0	I withdrew these cases on payment of costs, the defendant undertaking to be careful in future.
„ 16	Louisa Purcell, dressmaker, Park Street, Bristol.	W. H. Budgett and Wilberforce Jose, Esqs., Bristol.	Not reporting overtime made on 12th May 1893, by 8 p.m. on same day.	0 5 0	0 9 0	
„	„ „	„ „	Not allowing 400 cubic feet of space for each person employed in overtime on the same date.	2 0 0	0 7 0	
„	Robert Moon, tinplate worker, Temple Back, Bristol.	„ „	Not affixing Abstract of the Act - -	0 10 0	0 7 0	
„	„ „	„ „	Not keeping register of young persons - -	0 10 0	0 7 0	
„	„ „	„ „	Employing two young persons for six months without a certificate of fitness from the surgeon.	1 0 0	0 18 0	
Aug. 2	T. C. Smith, tailor, Castle Street, Thornbury, Gloucester.	Hon. Robert William Hy. Rodney, Henry R. P. Salmon, W. A. Harford, W. H. Harford and Edward Harwood, Esqs., Petty Sessions, Thornbury.	Not affixing Abstract - - - -	0 1 0	0 5 0	
„	„ „	„ „	Employing two young persons, from 6 a.m. to 4.45 p.m. on Saturday 10th June 1893, no other half-holiday being substituted.	0 2 0	1 0 0	The Magistrates characterised this as a "technical offence" and imposed the "smallest possible penalty."

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bristol District*—cont.	£ s. d.	£ s. d.	
Aug. 3	Robert John Thorne, saw mill proprietor, Swain Street, Watchet, Somerset.	D. Badcock, Esq., Captain A. F. Luttrell, Petty Sessions, Williton.	(1.) Not keeping register of young persons	0 5 0	0 3 6	
"	" "	" "	(2.) Employing Robert George Norman, a child aged 12, from 6 a.m to 8 p.m. on Wednesday, 6th June, he having been employed full time the previous day.	0 5 0	0 7 0	
"	" "	" "	(3.) Employing Wm. Harris, a young person, from 6 a.m. to 8 p.m. on 6th June.	0 5 0	0 7 0	
"	" "	" "	(4.) Employing Wm. Searle aged 14, for nine months, without a certificate of fitness from the surgeon.	0 5 0	0 7 0	
Sept. 15	Fredk. W. Chappell, lithographer and letterpress printer, 1, 2, and 3, Thomas Lane, Bristol.	Francis James Fry and A. Hamil Ford, Esqs., Bristol Police Court, Bridewell Street.	Neglecting to fence securely the "belt" pulleys of a "cropper" printing machine, whereby a lad, Geo. Thos. Clements suffered bodily injury, to wit, a broken leg. Under section 82.	5 0 0	0 9 0	Mr. Chappell had compensated the boy with three months wages, so the Bench thought that this penalty would meet the case. The amount of the fine was awarded by the Secretary of State to the mother of the injured person.
"	" "	" "	Neglecting to report the above accident forthwith.	1 0 0	0 7 0	Mr. Chappell had sent an informal report seven days after the accident.
"	John Osborne, parent, 25, Cornwallis Place, Baptist Mills, Bristol.	" "	Allowing his child, Mabel Osborne, to be employed full time at Messrs. Wills' factory, she being only 12 years of age, and having obtained employment by presenting a false certificate.	0 5 0	0 9 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Bristol District*—cont.	£ s. d.	£ s. d.	
Sept. 21	John Priest and Son, iron fence manufacturers, Shirehampton, Bristol.	Francis Tagart (Chairman), Wm. Smith, and Wm. Summerville, junr., Esqs., Lawford's Gate Police Court, Bristol.	Employing a boy under 16 (Chas. Watts), for three months, without a certificate of fitness.	- -	0 7 6	Dismissed on informality of information. It transpired that the real title of firm is John Priest and Son, Limited. I was not aware of this, and omitted the "Limited" in making out the information.
"	Edwin Lesly, match-box wood manufacturers, Dean Lane, St. George, Bristol.	" "	(1.) Employing a child (Elizabeth Arnold), full time.	0 5 0	0 13 0	
"	" "	" "	(2.) Employing a girl under 16 (Alice Newcombe), for 12 days without a certificate of fitness.	0 5 0	0 14 0	
Oct. 13	Edward Clarke, parent, 12, Prince's Terrace, Midland Road, Bristol.	E. Robinson and R. H. Lymes, Esqs., Bristol Police Court.	Allowing his son, J. H. M. Clarke, a boy of 12 years of age, to be employed full time; a falsified certificate of birth being tendered to the employer.	0 10 0	0 9 6	
" 23	Archer Figenbone, tailor, 57, Frogmore Street, Bristol.	J. W. Hall and J. C. Godwin, Esq., Bristol Police Court.	Employing three women in the meal-time, to wit, at 5.24 p.m.; the time affixed on Abstract being from 5 to 5.30 p.m.	0 5 0	1 2 0	
1892.			*In the South Metropolitan District.*			
Dec. 14	F. Baldiston, newspaper printer, High Street, Croydon.	E. Voss, (Mayor), Fredk. Edridge, Esqs., and others, Town Hall, Croydon.	Having employed a young person under the age of 16 years, up to the hour of 11.15 p.m. on Friday, 23rd September 1892.	1 0 0	0 8 6	
"	" "	" "	Having employed same young person on Saturday, 24th September, up to 5 p.m.	0 5 0	0 6 6	
"	" "	" "	Having employed same young person on Friday, 25th November 1892, up to 11 p.m.	0 5 0	0 6 6	
"	" "	" "	Having employed same young person on Friday, 2nd December 1892, after 10 p.m., to wit, until 10.20 p.m.	0 5 0	0 6 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District—cont.*	£ s. d.	£ s. d.	
Jan. 23	Theobald and Sons, tobacco manufacturers, 108, High Street, Chatham.	A. E. Attawes, Esq., Chatham Police Court.	Employing a child, aged 13, full time without required educational certificate.	1 0 0	0 8 6	
"	" "	" "	Failing to limewash factory within 14 months from date of last limewashing.	1 0 0	0 5 6	
Feb. 1	Peter Bleines, baker, 46, York Road, Battersea.	R. J. Biron, Esq., Q.C., Lambeth Police Court.	For having employed a young person 14 years of age, to wit, one Wm. Spinks, from 11 p.m. on Friday, 13th January 1893 to 8 p.m. on Saturday the 14th.	5 0 0	} 0 9 0	
"	" "	" "	For having employed the same young person on Sunday the 15th January.	1 0 0		
"	" "	" "	For having employed the same young person before 6 a.m., or 7 a.m., on Monday the 16th January, to wit, from 11 p.m. on Sunday night.	1 0 0		
" 8	Ed. Otto Von der Meden, trading as A. T. Lambert & Co., tobacco manufacturers, 108, High Street, Croydon.	The Mayor of Croydon and D. B. Miller, Esq., Croydon.	For having employed two young persons after the hour of 4 p.m. on Saturday the 14th January, to wit, until 9 p.m.	1 0 0	0 13 0	
"	" "	" "	For having neglected to limewash the factory for three years.	1 0 0	0 5 6	
"	" "	" "	For neglecting to affix Abstract - -	0 10 0	0 5 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
Mar. 7	William Richter, portmanteau maker, 161, Camberwell Road.	A. A. Hopkins, Esq., Lambeth Police Court.	For employing four young persons on Thursday, 9th February, from 6 a.m. till 9 p.m.	6 0 0	2 4 0 (for the four cases)	One of the young persons summoned as a witness did not appear in answer to summons, so Mr. Hopkins said he would fine 2*l.* in each of the other cases and give costs in all. (four cases)
"	" "	" "	For employing the same young persons on Friday, 10th February, from 6 a.m. till 9 p.m.	6 0 0		
"	" "	" "	For employing the same young persons on Saturday, 4th February, from 6 a.m. till 6 p.m.	6 0 0		
"	" "	" "	For employing the same young persons on 29th January (Sunday), from 6 a.m. till 2 p.m.	6 0 0		
" 9	A. G. Scott & Co., tin workers, Grove Street, Deptford.	R. H. B. Marsham, Esq., Greenwich Police Court.	For neglecting to report to the certifying surgeon for the district the following accidents:—			
			On 20th October 1892, accident to William Atkins.	-	-	Withdrawn. Not found at address given.
			On 10th November 1892, accident to Thomas Berry.	-	-	Withdrawn. Never worked at Scott's.
			On 22nd November 1892, accident to William Young.	-	-	Withdrawn. Never worked for A. G. Scott & Co.
			On 28th November 1892, accident to Frederick Newber.	-	-	Withdrawn. Not found at address given.

Return of Prosecutions—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
Mar. 9	A. G. Scott & Co., tin workers, Grove Street, Deptford.	R. H. B. Marsham, Esq., Greenwich Police Court.	For neglecting to report to the certifying surgeon for the district the following accidents—*cont.*—			
			On 30th November 1892, accident to Thomas Warden.	2 0 0	2 6 0 (for these four accidents)	
			On 14th January 1893, accident to Stephen Rawlins.	2 0 0		
			On 19th January 1893, accident to Charles Hope.	2 0 0		
			On 8th February 1893, accident to John Fenton.	2 0 0		
„	J. Walters, saw mill, Railway Arches, Southwark Park Road.	„ „	Neglecting to affix Abstract after having been instructed to do so.	1 0 0	0 2 0	
„	„ „	„ „	Failing to produce his register of young persons, and other matters under the Act.	0 10 0	0 2 0	
„ 15	Spratt's Patent, Limited, Dog Biscuit Works, Henry Street, Bermondsey.	W. F. Fenwick, Esq., Police Court, Southwark.	Employing eleven young persons illegally after 7 p.m.	11 0 0	1 19 6	
„ 22	The Reliance Iron Tank Co., Suffolk Grove, S.E. (H. C. Brown, manager).	W. Slade, Esq., Southwark Police Court.	Not affixing Abstract - - - -	1 0 0	0 4 0	
„	„ „	„ „	Not fencing securely the fly-wheel of engine and other dangerous machinery.	3 0 0	0 4 0	
„	„ „	„ „	Not keeping register of young persons - -	1 0 0	0 6 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
Mar. 28	London Steam Stone Saw Mills, Limited.	G. Denman, Esq., South-Western Police Court.	Failing to fence securely engine and dangerous machinery.	2 0 0	0 2 0	Adjourned from 21st March.
„ 29	F. Baldiston printer, Croydon	F. Foss (Mayor), and D. Miller, Esqs., Police Court, Croydon.	Not keeping prescribed register - -	2 0 0	0 13 0	
„	„ „	„ „	Employing a young person without certificate of fitness.	1 0 0	0 10 0	
„ 30	W. J. Dixon & Co., brass, &c., works, Sylvan Grove, Old Kent Road.	W. Slade, Esq., Police Court, Southwark.	Not exhibiting Abstract of Act - - -	1 0 0	0 3 6	
„	„ „	„ „	Not fencing engine - - - -	1 0 0	0 3 0	
„	„ „	„ „	Employing a young person without surgical certificate.	1 0 0	0 3 0	
„	Gore & Co., tobacco works, 739, Old Kent Road.	„ „	Not specifying hours for work or meals - -	1 0 0	0 5 0	
„	„ „	„ „	Not fencing fly-wheel of engine - - -	1 0 0	0 5 0	
„	„ „	„ „	Employing two young persons without surgical certificates.	2 0 0	0 5 0	
„	Lambeth Brass and Iron Co., Limited, Short Street, Lambeth.	„ „	Employing three young persons without surgical certificates.	3 0 0	0 16 6	
„	R. Tilling, printer, Warner Street, S.E.	„ „	Not fencing fly-wheel of engine - - -	1 0 0	0 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
April 4	W. W. Martin, builder, Ramsgate.	W. P. Blackburn and E. Syvett, Esqs., Town Hall, Ramsgate.	Employing a young person after 2 p.m. on Saturday.	0 4 6	0 15 6	
„ 6	Esther Marks, milliner, &c., Lambeth Lower Marsh.	W. Slade, Esq., Southwark Police Court.	Employing three women after 2 p.m. on Saturday.	2 0 0	0 16 6	One case fell through.
„	Slazenger and Sons, tennis bat, &c., works, waterproof clothing, &c., Lower Road, Deptford.	W. B. Marsham, Esq., Greenwich Police Court.	Not specifying hours of work and meals in Abstract.	0 5 0	0 5 6	
„	„ „	„ „	Employing four young persons without surgical certificates.	2 0 0	1 2 0	
„ 10	W. H. Randall, tailor, Littlehampton.	Sir H. Fletcher, Bart., and Capt. Kemp, Arundel Town Hall.	Employing three young persons after 2 p.m. on Saturday.	0 18 0	2 2 0	
„ 14	A. Smithers, printer, Newington Butts.	R. J. Biron, Esq., Q.C., Lambeth Police Court.	Employing two young persons overtime without observing the required conditions.	0 2 0	0 10 0	
„ 24	J. W. Holloway, engineer, Shoreham, Sussex.	H. T. West, Esq., and Col. Ingram, Steyning Petty Sessions.	Failing to fence mill-gearing - - -	2 0 0	2 4 0	
May 1	Josiah Austin, mineral water maker, Ramsgate.	— Blackburn and — Hammond, Esqs., Ramsgate Town Hall.	Employing a young person both on Good Friday and Easter Monday.	- -	0 12 0	I asked for costs only, as the boy had only been partially employed on the days in question.
„ 5	W. Amos, milliner, Falcon Road, Battersea.	A. A. Hopkins, Esq., South-Western Police Court.	Employing three women overtime without observing required conditions of space, register, &c.	3 0 0	0 15 0	
„	W. Patmore, cycle works, Wimbledon.	„ „	Employing a young person after 2 p.m. on Saturday.	1 0 0	0 5 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
May 10	M. Whall, dressmaker, 39, Gipsy Hill, Norwood.	A. A. Hopkins, Esq., Lambeth Police Court.	Employing three women after 4 p.m. on Saturday.	0 15 0	0 19 6	
„ 13	T. Jenkins, printer, Bexley Heath, S.E.	— Bevan, Esq., and — Fooks, Esq., Q.C., Dartford Police Court.	Not fencing fly-wheel of gas engine	2 0 0	0 14 0	
„	„ „	„ „	Not specifying hours on Abstract	2 0 0	0 10 0	
„	„ „	„ „	Employing a young person without surgical certificate.	2 0 0	0 10 0	
„ 29	N. Brooks, bookbinder, Ramsgate.	G. Blackburn and N. Weigall, Esqs., Ramsgate Town Hall.	Not specifying hours of work on Abstract	0 0 6	0 10 6	
„	„ „	„ „	Not limewashing the whole premises	0 0 6	0 10 6	
„ 30	Lyle and Marshall, mineral water works, Ashford, Kent.	T. Nottidge and W. Pomfret, Esqs., Ashford Police Court.	Employing a woman and young person on Good Friday and Easter Monday.	0 2 0	1 4 0	
June 3	J. Hylands & Co., Limited, silk printers, Dartford.	T. Bevan, Esq., and G. Fooks, Esq., Q.C., Dartford Police Court.	Not specifying period of employment, &c.	2 0 0	0 14 0	
„	„ „	„ „	Employing a young person before 6 a.m. on May 12th and May 13th.	4 0 0	1 1 0	
„ 7	R. White and Sons, mineral water works, Victory Place, Walworth.	R. J. Biron, Esq., Q.C., Lambeth Police Court.	Not fencing engine	2 0 0	0 5 0	
„ 8	T. and J. Hosking, engineers, Parker's Row, Dockhead.	W. Slade, Esq., Southwark Police Court.	Not fencing change-gear of two lathes	0 10 0	0 4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
June 8	T. and J. Hosking, engineer, Parker's Row, Dockhead.	W. Slade, Esq., Southwark Police Court.	Not fixing hours on Abstract	0 10 0	0 4 0	
"	H. Grant & Co., Limited, tin-plate works, Dockley Road, S.E.	" "	Not fencing stamping presses	1 0 0	0 6 0	
" 15	A. Lloyd and Sons, Limited, tin-plate works, Dockhead, S.E.	" "	Not fencing engine	1 0 0	0 5 0	Adjourned from 8th June. Costs only in last case, as the constitution of the firm had lately been changed.
"	" "	" "	Not fencing certain stamping presses	1 0 0	0 5 0	
"	" "	" "	Not limewashing certain rooms	-	0 4 0	
" 16	The Dangerfield Printing Co., West Street, Battersea.	Haden Corser, Esq., South-Western Police Court.	Employing *two* young persons on *two* occasions after seven p.m. illegally (four summonses).	2 0 0	0 17 0	
July 15	Isaiah Cheale, miller, windmill, Ore, Hastings.	Sir A. Ashburnham, Bart., and Viscount Cantelupe, Town Hall, Hastings.	Neglecting to fence machinery whereby a young person suffered bodily injury.	-	1 2 0	Case dismissed on the ground that I was unable to prove that the information was laid within three months after the accident came to the knowledge of an inspector. The accident occured on January 11th. The first intimation of it reached the Home Office on May 9th, and I laid my information on July 3rd. But I had no evidence to produce that the letter of May 9th was the first intimation, and was not allowed to produce the letter in court.

RETURN OF PROSECUTIONS—*continued*.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
Sept. 6	H. D. Rawlings, Limited, mineral water works, Chumleigh Street, Camberwell.	G. Sheil, Esq., Lambeth Police Court.	Failing to fence engine - - - -	0 5 0	0 2 0	
"	A. G. Scott & Co., Limited, tinware works, Grove Street, Deptford.	G. Kennedy, Esq., Greenwich Police Court.	Employing a young person overtime without registering and reporting same.	1 0 0	0 5 6	
" 7	Samuel Cole, printer, 31, High Street, Sheerness-on-Sea.	Col. Hartley (Deputy Stipendiary), Police Court, Sheerness.	Not fencing fly-wheel of gas engine - -	0 2 6	0 10 6	
"	" "	" "	Employing young person overtime without exhibiting proper notice, &c.	0 2 6	0 9 0	
" 26	J. Rickard, cycle works, Doris Street, Kennington.	A. A. Hopkins, Esq., Lambeth Police Court.	Not fencing fly-wheels of gas engines -	2 0 0	0 3 0	
"	" "	" "	Employing two young persons without surgical certificates.	1 0 0	0 10 0	
" 27	Albert Collier, machine man at Grant & Co.'s Tin Works, Dockley Road, S.E.	R. B. Marsham, Esq., Southwark Police Court.	Neglecting to maintain certain fencing -	0 10 0	0 9 0	
" 28	H. Dudman, tobacco pipe maker, 71, Blomfield Road, Plumstead.	R. B. Marsham, Esq., Woolwich Police Court.	Employing a young person after 2 p.m. on Saturday, from 7 a.m.	2 0 0	0 4 0	
"	" "	" "	Employing same young person without surgical certificate.	1 0 0	0 3 6	
"	A. Thorogood, baker, Plumstead Road, S.E.	" "	Not exhibiting Abstract of Act - - -	1 0 0	0 4 0	
"	" "	" "	Employing a young person at night - -	2 0 0	0 3 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
Oct. 3	Doulton & Co., Lambeth Potteries.	A. A. Hopkins Esq., Lambeth Police Court.	Not keeping register - - - -	2 0 0	} 0 18 6	
"	" "	" "	Employing three young persons without surgical certificates.	6 0 0		
"	J. C. and J. Field, Limited, candle works, Upper Marsh, Lambeth.	" "	Employing two young persons after 7 p.m. on two occasions.	8 0 0	0 15 0	
"	Creighton & Co., collar makers, Heiron Street, Walworth.	" "	Not fencing engine - - - - -	1 0 0	} 0 18 6	
"	" "	" "	Employing three young persons without surgical certificates.	3 0 0		
"	B. Fabricotti, marble works, Auckland Street, S.W.	" "	Not fencing mill-gearing - - - -	1 0 0	0 2 0	
" 4	E. H. Bayley & Co., Limited, wheel and van works, Newington Causeway.	R. B. Marsham, Esq., Borough Police Court.	Not keeping register - - - -	1 0 0	0 3 0	
"	" "	" "	Employing two young persons without surgical certificates.	2 0 0	0 10 0	
" 7	The Sheppy Glue and Chemical Works, Limited, Queenborough, Kent.	E. Howe and E. Twopenny, Esqs., Town Hall, Queenborough, Kent.	Not reporting a fatal accident immediately -	0 1 0	0 11 6	
" 10	Waltham Bros., Limited, brewers, Stockwell Green.	A. A. Hopkins, Esq., Lambeth Police Court.	Not keeping prescribed register - -	2 0 0	} 0 15 0	
"	" "	" "	Employing a young person without surgical certificate.	2 0 0		

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District—cont.*	£ s. d.	£ s. d.	
Oct. 10	Waltham, Bros., Limited, brewers, Stockwell Green.	A. A. Hopkins, Esq., Lambeth Police Court.	Employing two young persons after 2 p.m. on Saturdays.	4 0 0		
"	London, Chatham, and Dover Railway Company, Signal Works, Brixton.	" "	Not limewashing factory - - -	2 0 0	0 6 6	
" 11	The Projectile Company, Limited, New Road, Wandsworth Road, S.W.	G. Haden Corser, Esq., South-Western Police Court.	Neglecting to maintain fencing to gear wheels of lathe, whereby a man suffered bodily injury.	20 0 0	0 11 0	By order of the Secretary of State the amount of the fine was awarded to the injured person.
"	T. Woodward, Plough Brewery, Wandsworth Road, S.W.	" "	Not keeping register of young persons -	0 10 0		
"	" "	" "	Employing a young person without surgical certificate.	0 10 0	0 15 0	
"	" "	" "	Employing two young persons after 2 p.m. on Saturday afternoon.	1 0 0		
" 19	The Minerva Printing Bookbinding Company, Oak Street, Deal.	G. Brown, Esq., and Captain Mourilyan, Town Hall, Deal.	Not fencing fly-wheel of gas engine and mill-gearing.	1 0 0	0 10 6	
"	" "	" "	Not keeping prescribed register - -	0 10 0	0 12 0	
"	Ralph and Son, coachbuilders, West Street, Deal.	" "	Not affixing Abstract and notices - -	0 10 0	0 8 0	
"	" "	" "	Employing a young person after 2 p.m. on Saturday.	0 10 0	0 11 6	
"	S. W. Job, coachbuilder, West Street, Deal.	" "	Not affixing Abstract and notices - -	0 7 6	0 10 6	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
Oct. 19	S. W. Job, coachbuilder, West Street, Deal.	G. Brown, Esq., and Captain Mourilyan, Town Hall, Deal.	Employing a young person after 2 p.m. on Saturday.	0 7 6	0 7 0	
" 23	E. Epps, dressmaker, Ellington Road, Ramsgate.	Sebay Montefiore, Esq., and E. Syvett, Esq., Town Hall, Ramsgate.	Not exhibiting record of overtime during the period of overtime.	0 1 0	0 15 6	
"	" "	" "	Employing a woman after 10 p.m. - -	0 1 0	0 10 0	
Oct. 25	Hunt and Son, engineers, Bridge Road, West Battersea.	G. Denman, Esq., South Western Police Court.	Failing to maintain fencing to engine - -	5 0 0	0 5 0	
"	" "	" "	Failing to obtain certificate of fitness of young person.	3 0 0	0 2 6	
" 26	Emilie Bell, milliner, High Street, Deal.	J. Lush, Esq. and Captain Mourilyan, Town Hall, Deal.	Not affixing Abstract and notices - -	0 10 0	0 10 6	
"	F. Giraud, printer, Broad Street, Deal.	" "	Not fencing fly-wheel of gas engine and dangerous machinery.	0 10 0	0 7 0	
"	G. H. Denne and Son, builders, Queen Street, Deal.	" "	Not fencing engine fly-wheel and driving-pulley.	1 0 0	0 9 0	
" 27	B. W. Davis, engineer, Ebenezer Row, Kennington.	G. Biron, Esq., Q.C., Lambeth Police Court.	Not obtaining certificate of fitness of a young person.	0 5 0	0 5 6	
" 28	C. Winterflood, dressmaker, 15A, Hampton Place, Brighton.	G. Heathcote and G. Davey, Esqs., Town Hall, Brighton.	Not affixing Abstract and notices - - -	0 2 6	0 14 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the South Metropolitan District*—cont.	£ s. d.	£ s. d.	
Oct. 28	Hillier and Fieldus, dress-makers, 28, Hampton Place, Brighton.	G. Heathcote and G. Davey, Esqs., Town Hall, Brighton.	Not affixing Abstract and notices - - -	0 2 6	0 14 0	
„ 30	Marie & Co., dressmakers, 139, Church Road, Hove.	Montagu Scott, Esq., and G. Loder, Esq., M.D., Town Hall, Hove.	Not affixing Abstract and notices - -	0 10 0	0 10 0	
„	„ „	„ „	Employing a young person after 7 p.m., without exhibiting special notice.	0 10 0	0 8 6	
1892.			*In the Southampton District.*			
Nov. 18	W. Kitson & Co., dress and mantle makers, High Street, Winchester.	W. Shenton (Mayor, in the chair), L. J. Carter (Ex-Mayor), Esqs., Col. Dickens, and W. H. Jacobs, Esq., &c., Winchester.	Employing a woman and a young person after 4 o'clock on Saturday.	2 0 0	1 1 0	These costs included 3*s.* 6*d.* ordered by the Bench to be paid to each of my witnesses on my representing that one of them had been sent home after the summons was taken out. These cases were very bad ones, as when visiting Kitson & Co's. premises on Saturday, October 29th, Mrs. Kitson had told me they had no workroom except the kitchen, and had purposely hidden the fact from me of having a workroom in the rear of the premises; not feeling satisfied I watched the premises and caught the girls coming out.
„	„ „	„ „	Not exhibiting Abstract and notices - -	0 10 0	0 7 0	
„	„ „	„ „	Not having sent written notice to the inspector of commencing to occupy a workshop.	- -	0 5 6	
Dec. 6	Dicks and Sons, gasfitters, &c., Silver Hill, Winchester.	Col. Dickens; C. Drew, and H. Kelsey, Esqs., Winchester.	Employing two young persons after 2 o'clock on Saturday.	0 1 0	0 18 0	These were not bad cases, and I only asked for a nominal penalty.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1892.			*In the Southampton District*—cont.	£ s. d.	£ s. d.	
Dec. 19	Miss Allsop, dressmaker, Palmerston Road, Southsea.	Captain McCoy, J. King, and G. S. Lankester, Esqs., Portsmouth.	Employing two women and one young person after 4 o'clock on Saturday.	0 2 0	1 7 0	I did not press for penalties in these cases, as the girls seem generally to have been well treated.
„	„ „	„ „	Not affixing the prescribed Abstract and notices.	0 2 0	0 12 0	The costs in this case included 3*s.* conduct money.
1893.						
Feb. 8	Bucroft and Sons, printers, Station Hill, Reading.	W. Berkley Monk and J. W. Hounslow, Esqs., Reading.	Employing a young person for two hours overtime without keeping the prescribed record of overtime, or sending notice to the inspector.	1 0 0	0 8 0	
„	„ „	„ „	Not ventilating their premises in such a manner as to render harmless as far as practicable the gases generated in the process of manufacture carried on.	0 1 0	0 6 0	In this case the solicitor for the defence pleaded that the work had already been put in hand, and his clients were prepared to do all that was necessary to ensure the health of their people, so I only asked for a nominal penalty.
„ 13	T. C. Small, lace manufacturer, Perry Street, Chard.	Major Langdon and Captain King, Chard.	Employing two children before noon and after noon of the same day.	- -	- -	Dismissed, the evidence being conflicting. The overlooker in one case swearing the child had not been in the factory till 1 p.m.
„ 15	Henry Lewis, Thames Bank Iron Works, Reading.	H. B. Blandy and Jas. Simmons, Esqs., Reading.	Employing a young person of 15 before six in the morning.	1 0 0	0 9 0	The boy was regularly employed from 5 a.m. to 5.30 p.m.
„	„ „	„ „	Employing a young person under 16 without a certificate of fitness.	1 0 0	0 9 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Southampton District*—cont.	£ s. d.	£ s. d.	
Feb. 16	S. J. Alsford, stonemason, Palmerston Road, Boscombe.	The Mayor, W. Newlyn, and E. Rebbick, Esqs., Bournemouth.	Not securely fencing an engine and mill-gearing.	0 10 0	0 7 0	
"	" "	" "	Not affixing the prescribed Abstract of the Act in his factory.	0 2 6	0 7 0	
" 17	Bramble Bros., saw mills, Portsea.	R. Marvin, J. J. Sapp, and A. W. White, Esqs., Portsmouth.	Not affixing the prescribed Abstract of the Act in his factory.	0 2 0	0 8 0	It is not much use taking cases to this court, the fines are so inadequate to act as a deterrent.
"	F. Bevis, saw mills, Landport	" "	Not affixing the prescribed Abstract of the Act in his factory.	0 2 0	0 8 0	No Abstract exhibited, and the register had apparently never been opened.
"	" "	" "	Employing a young person without a certificate of fitness.	- -	0 12 6	Fined in costs only.
"	Boyle & Co., corset works, Landport.	" "	Not registering date of limewashing - -	0 2 0	0 8 0	Limewashing eight months overdue, had previously cautioned this firm about this offence.
Mar. 1	T. G. Hann, saw mills, Martock.	H. B. Batten, G. Troyte, and F. Shuldham, Esqs., Yeovil.	Not securely fencing mill-gearing - - -	1 0	0 9 0	Previously cautioned.
"	The Ham Hill Stone Co., stone mills, Ham Hill.	" "	Employing two young persons under 16 without certificates of fitness.	1 0 0	0 15 0	
" 2	Dowden & Co., mineral water works, Bournemouth.	H. Newlyn and E. Rebbick, Esqs., Bournemouth.	Not securely fencing every part of a steam-engine.	3 0 0	0 12 0	Cautioned in November last about these offences.
"	" "	" "	Not affixing the prescribed Abstract of the Act.	1 0 0	0 9 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
[illegible]			*In the Southampton District—cont.*	£ s. d.	£ s. d.	
Mar. 6	B. Hawkins, saw mills, Andover Junction.	C. Herbert, C. W. Kellow, W. Bracher, and C. H. Green, Esqs., Andover.	Employing a young person after 2 o'clock on Saturday.	0 10 0	0 11 0	Mr. Hawkins had been cautioned in 1891 by Mr. Whymper.
"	" "	" "	Employing a young person without a certificate of fitness.	0 10 0	0 12 0	
" 8	Boden & Co., lace factory, Chard.	T. H. Mitchell and A. V. Kyrke, Esqs., Chard.	Employing a young person under 16 after 6 o'clock in the evening.	- -	0 6 0	This boy had been employed under special exception 10, under the impression that he was over 16. As Messrs. Boden promised strict compliance with the law in future, and I had had no previous complaints against them, I did not ask for penalties.
"	" "	" "	Employing a young person without a certificate of fitness.	- -	0 6 0	
"	Amery & Co., shirt factory, Chard.	" "	Employing a child without entering her name in the register.	0 6 0	0 6 0	As Mr. Amery undertook that the law should be observed in future I only asked for a penalty in one case.
"	" "	" "	Failing to produce a certificate of school attendance for a child employed in their factory.	- -	0 6 0	
"	" "	" "	Employing two young persons under 16 without having obtained certificates of fitness.	- -	0 12 0	
" 13	John C. Small, lace manufacturer, Perry Street, Chard.	Colonel Henney and Major Langdon, Chard.	Employing two children during meal times -	- -	0 16 0	In consequence of a letter from Mr. Small's solicitors, I withdrew the charges on payment of costs.
"						

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1894.			*In the Southampton District*—cont.	£ s. d.	£ s. d	
Mar. 16	H. B. Watson, engineer, Portsmouth.	Alderman Ellis and T. Cook, Esq., Portsmouth.	Not exhibiting the prescribed Abstract of the Act.	0 2 0	0 8 0	I have before drawn attention to the almost uselessness of bringing Factory Act cases to this court on account of the utter inadequacy of the fines imposed. The defendant had been served with a circular in reference to similar offences last year.
"	" "	" "	Employing a young person under 16 without a certificate of fitness.	- -	0 10 0	
" 28	The Dorset Lime and Cement Co., Coaxden, Dorset.	Marwood Tucker, junr., and B. M. Davy, Esq., Axminster.	Not securely fencing mill-gearing	2 0 0	0 9 0	In both these cases previous offences had been discovered and cautions given.
"	J. B. Head, Axminster Saw Mills, Millbrook.	" "	Employing two young persons after 2 o'clock on Saturday.	2 0 0	0 18 0	
Apr. 6	Carson and Toone, engineers, Warminster.	Captain Hulme, Captain Southey, Rev. W. Hickman, Sir H. Pelley, Bart., and H. J. Cookson, Esq., Warminster.	Employing a child before noon and after noon of the same day.	1 0 0	0 6 0	The second conviction of this firm within two years.
"	" "	" "	Employing a child without a certificate of fitness.	1 9 0	0 11 0	
"	Mark Hill Saw Mills, Warminster.	" "	Employing a young person after six o'clock in the evening.	- -	- -	Case dismissed. Defendants pleaded that owing to a break-down the young person was employed as a labourer repairing machinery, and therefore under section 100 was exempt from the Act. The boy was cleaning out the saw-pit and was one of the regular staff employed in Mr. Hill's saw mills.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Southampton District*—cont.	£ s. d.	£ s. d.	
Apr. 12	A. E. Porter, saw mills, Church Street, Landport.	G. S. Lancaster, F. Gieve, Esqs., and General Patty, Portsmouth.	Not securely fencing mill-gearing when in motion.	0 10 0	0 10 0	
"	" "	" "	Failing to register a young person - -	- -	0 12 6	Defendant fined in costs only.
" 20	J. L. Aylward, Great Bridge Mill, Romsey.	Hon. H. Curzon, Col. Griffiths, and E. Faber, Esq., Romsey.	Not reporting an accident by which a person suffered bodily injury.	1 0 0	0 12 6	
"	" "	" "	Employing a young person after 2 o'clock on Saturday.	0 10 0	0 12 6	
" 21	B. Chignall, printer, Romsey -	The Mayor, W. B. George, and W. E. Godfrey, Esqs., Romsey.	Employing a child full time -	0 5 0	0 10 0	
May 1	George Ebbom, baker, Above Bar, Southampton.	Aldermen J. H. Cooksey and J. P. Payne, &c., &c., Southampton.	Employing a young person over 16 years of age after the usual hours of employment on March 30th, and before the usual hours of employment on the following day, March 31st.	1 0 0	0 9 2	These boys were kept at work from 6 a.m. on March 30th till 10 a.m. on March 31st, a period of 28 hours, without any cessation except three hours allowed for meals.
"	" "	" "	Employing a young person under 16 after 6 o'clock in the evening, March 30th.	1 0 0	0 9 2	
"	" "	" "	Employing a young person under 16 years of age after 6 o'clock in the evening on April 17th.	1 0 0	0 9 2	
" 11	H. Hurley, Abby Flour Mills, Bishop's Waltham.	J. Carpenter-Garnier, Esq., in the Chair, Colonels Campbell, Wyndham, and Bowers; Droxford.	Not securely fencing mill-gearing - -	1 0 0	0 11 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Southampton District*—cont.	£ s. d.	£ s. d.	
June 6	Cousens & Co., engineers and ironfounders, Weymouth.	J. E. Robins and John Vincent, Esqs., Weymouth.	Employing two young persons without certificates of fitness.	0 2 0	0 18 0	This being the first prosecution in Weymouth I only asked for nominal penalties.
„ 27	R. Kellaway, machinist, Bere Regis.	Colonel Pickard-Cambridge and H. R. Frampton, Esq., Wareham.	Employing a young person after 2 o'clock on Saturday.	0 1 0	0 14 0	
„	E. Shave, wheelwright, Bere Regis.	„ „	Employing a young person after 2 o'clock on Saturday.	0 1 0	0 15 0	
Aug. 19	Longley and Sons, saw mills, Railway Station, Havant.	J. A. N. Martin and S. P. Martin, Esqs., Major C. P. Boyd, and General Napier, Havant.	Not securely fencing an engine - - -	1 0 0	0 11 0	I had on a previous occasion instructed the foreman that this engine though running in an open field should be fenced, and had sent a circular to the firm.
Sept. 18	F. A. Buckingham, saw mills, Honiton.	J. B. Avery, Esq., (Mayor in the Chair), C. Reed, Esq., Ex-Mayor), Honiton.	Not securely fencing the fly-wheel of an engine.	1 0 0	0 10 6	
Oct. 9	Reed and Smith, Silverton Paper Mills, Collumpton, Devon.	J. H. Hopburn, J. Turner, and H. Clarke, Esqs., Collumpton.	Not securely fencing engines and mill-gearing	- -	0 15 0	The defendants having written to say that they had put all the work in hand before the summons was taken out, and Mr. Harston, H.M. Inspector, having visited the mill and reported that most of the fencing was finished, I withdrew the summons, the defendants paying costs.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the Southampton District—cont.	£ s. d.	£ s. d.	
1893.						
Oct. 26	Parrott and Sons, confectioners, High Street, Poole.	The Mayor in the Chair, J. J. Norton, J. B. Durrel, and G. H. Gutch, Esqs., Poole.	Employing a child of twelve both before noon and after noon of the same day.	0 7 6	0 10 6	
"	" "	" "	Not affixing the prescribed abstract of the Act in their workshop.	0 1 0	0 7 6	
			In the Plymouth District.			
1892.						
Nov. 21	Josiah Wm. Parker, mineral water manufacterer, Fore Street, Liskeard.	The Mayor, and S. W. Jenkins. Esq., Town Hall, Liskeard.	Employing a young person after 2 p.m. on Saturday.	0 0 6	0 10 6	A similar case was heard at Liskeard on October 17th. The Magistrates thought this a trifling case although it was proved the lad never received a half-holiday, and was worked on the day in question from 6 a.m. to 9 p.m. The occupier had neglected to fix the Abstract nor had he obtained certificate of fitness.
1893.						
Jan. 27	Bickle & Co., Limited, engineers, Great Western Docks, Stonehouse, Plymouth.	Admiral Wilson, and Captain J. T. Harker, Police Court, Stonehouse.	Failing to procure certificates of fitness for four young persons.	1 0 0	0 10 0	
" 31	Rabling & Co., Tin Stream Kieve Mill Camborne.	D. W. Bain, and W. Pike, Esqs., Police Court, Camborne.	Employing a woman and a young person after 7 p.m. without sending to H.M. Inspector the required notice.	0 10 0	1 4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the Plymouth District*—cont.	£ s. d.	£ s. d.	
Jan. 31	Reskadinnick Tin Streaming Co., Tin Stream, Reskadinnick, Camborne.	D. W. Bain and W. Pike, Esqs., Police Court, Camborne.	Employing two young persons without obtaining certificates of fitness.	1 0 0	0 13 6	
Mar. 7	Wheal Agar Mining Co., Camborne.	" "	Employing three young persons after 9 p.m.	0 5 0	1 0 0	
June 19	Bloomfield and Julian, dressmakers, The Parade, Torquay.	L. B. Bowring, and W. B. Fortescue, Esqs., Police Court, Torquay.	Employing two young persons after 4 p.m. on Saturday.	1 1 0	0 19 0	
"	" "	" "	Employing two young persons after 8 p.m. without sending required notice to H. M. Inspector.	0 3 6	0 16 6	
" 21	A. McCormack, cycle manufacturer, Dartmouth Place, Paignton.	Admiral Dawkins, and Major Turner, Police Court, Paignton.	Failing to obtain certificate of fitness for young person.	0 1 0	0 13 0	
			In the District of H.M. Superintending Inspector of Workshops for the County of London.			
May 18	Nathan Cohen, tailor, 3, New Buildings, Tenter Street, E.	John Dickenson, Esq., Thames Police Court.	Having, on Monday, 17th April, employed two females after 8 p.m., without sending overtime notice or registering the same on the prescribed Form 12.	6 0 0	0 8 0	
"	Frank Baker, tailor, 76, Lucas Street, E.	" "	Having, on Monday, 17th April, employed two females after the hour of 10 p.m., to wit, until 10.25 p.m.	4 0 0	0 8 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London*—cont.	£ s. d.	£ s. d.	
May 24	Madam A. Magnier, dressmaker, 9, Wigmore Street, W.	R. M. Newton, Esq., Marylebone Police Court.	Having, on Monday, 24th April, employed one female after 10 p.m., to wit, till 10.20.	1 0 0	0 4 0	
„ 25	Solomon Woolf, tailor, 31, Pelham Street, Spitalfields.	Henry Jeffreys Bushby, Esq., Worship Street Police Court.	Having, on Thursday, 20th April last, employed two females after 10 p.m., to wit, till 10.22 p.m.	10 0 0	0 8 0	
„	„ „	„ „	For having neglected to affix the Form 12, or to procure the Register 40, as requested.	5 0 0	0 2 0	
„ 29	Morris Koski, tailor, 12, Leigh Street, Holborn.	J. R. W. Bros, Esq., Clerkenwell Police Court.	Having wilfully neglected to affix an Abstract and other notices in his workshop. Visited four times in 14 days.	2 0 0	0 2 0	
„ 30	Madame Christine Mercier, dressmaker, 156, Brompton Road, Kensington, S.W.	Albert De Rutzen, Esq., Westminster Police Court.	Having employed three females after 8 p.m., to wit, till 9.15 p.m., without having sent a register of such overtime, or making a record thereof on Form 12.	2 5 0	0 12 0	
„	E. Bussell, dressmaker, 175, Brompton Road, Kensington, S.W.	„ „	Having employed seven females after 8 p.m., to wit, until 9.30 p.m. without sending a register of such overtime, or making a record thereof on Form No. 12.	5 5 0	1 8 0	
June 1	Mrs. A. Mill, dressmaker, 170, High Street, Harlesden, N.W.	Wm. Bird and H. H. Pownall, Esqs., Harlesden County Court.	Employing three females on Saturday, 29th April 1893, after the hour of 4 p.m.	1 10 0	1 4 6	Penalty 10*s.* each case, and costs.
„ 6	Edward Costry, tailor, 35, Heddon Street, Regent Street.	James Lennox Hannay, Esq., Marlborough Street Police Court.	Having wilfully neglected to affix an Abstract and other forms appertaining thereto in his workshop.	2 0 0	0 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London—cont.*	£ s. d.	£ s. d.	
June 6	Katherine White Robertson, 44, Dover Street, Piccadilly, W.	James Lennnox Hannay, Esq., Marlborough Street Police Court.	Having, on Thursday, 11th May, and for a period of three months previously employed a child under the age of 13 years from 8.30 a.m. to 8 p.m., and on overtime.	3 0 0	0 4 0	
" 7	Caroline James, dressmaker, 94, Queens Road, Bayswater.	J. W. Cooke, Esq., Marylebone Police Court.	Having neglected to affix an Abstract or other forms in her workroom.	1 0 0	0 2 0	
"	Misses Pepper and Northam, dressmakers, 10, Thayer Street, Manchester Square, W.	" "	Having employed two female young persons up to 9.40 p.m. without sending register of overtime or making a record of the same on Form 12.	2 0 0	0 8 0	
" 9	John Brownlee, tailor, 230, Queen's Road, Dalston.	R. O. B. Lane, Esq., Dalston Police Court.	Having, on Saturday, 13th May, employed one young person and four women after 4 p.m., to wit, until the hour of 6 p.m.	5 0 0	1 0 0	
" 12	Watson and McRaith, court dress makers, 70/1, Mount Street.	J. Lennox Hannay, Esq., Marlborough Street, Police Court.	Having, on Monday, 8th day of May, employed five females from 8.30 a.m. to midnight.	25 0 0	1 0 0	
"	" "	" "	Having then and there employed ten other females from 10.30 p.m. to 11.15 p.m.	20 0 0	2 0 0	
" 13	Letitia Leonard, dressmaker, 70, Clapham Road.	Robt. J. Biron, Esq., Police Court, Lambeth.	Having neglected to affix an Abstract of the Workshops Act in her workroom though in her possession.	0 10 0	0 2 0	
"	Sarah Ann Hardcastle, dressmaker, 23, Clapham Road.	" "	Having, on Saturday, 20th May last, employed eight females after 4 o'clock, to wit, until 5 o'clock.	0 8 0	0 16 0	The Magistrate refused to allow costs of witnesses summonses 16s.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	Remarks.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London*—cont.	£ s. d.	£ s. d.	
June 14	John Egbers, tailor, 8, Great Turnstile, Holborn.	James Vaughan, Esq., Bow Street.	Having, on 18th May, employed three females after 10 p.m., to wit, to 10.20 p.m.	2 10 0	0 14 0	
" 14	Auguste Zrebiss, tailor, 8, Silver Street, Holborn.	" "	Having, on Friday, 19th May, employed three females after 10 p.m., to wit, until 10.45 p.m.	2 0 0	0 14 0	
" 15	James Amps, dressmaker, 8A, Bruton Street.	R. M. Newton, Esq., Marlborough Police Court.	Having, on 17th May last, employed 22 females after 8 p.m., to wit, until 9.20 p.m.; without sending to an Inspector, the prescribed notice, or affixing a record of said overtime. Ten cases were taken.	10 0 0	2 0 0	
" 16	Miss Eves and Miss Muschamp, dressmakers, 84, Queen's Road, Bayswater, W.	W. M. Cooke, Esq., Marylebone Police Court.	Having, on Friday, 5th May, employed two females till 9 p.m.; without sending notice of such overtime, or making a record thereof as prescribed.	2 0 0	0 8 0	
" 21	Madam P. Baker, waistcoat maker, 10, East Street, Lamb's Conduit Street.	Horace Smith, Esq., Clerkenwell Police Court.	Having, on 17th May, employed three females after 8 p.m., without recording the overtime or sending a register thereof.	0 15 0	0 12 0	
"	Julius Cohls, tailor, 1, Millman Street, Theobald's Road.	" "	Having, on 17th May employed two females to 10.30 p.m.	2 0 0	0 10 0	
"	George Belcher, tailor, 321, Gray's Inn Road.	" "	Having, on 17th May, employed seven females overtime, without recording it, or sending register thereof.	3 10 0	1 0 0	
" 23	Simon Silverman, tailor, 3, New North Street, Holborn.	" "	Having employed a female on the 17th May after 10 p.m., to wit, until 10.40.	1 10 0	0 4 0	
"	" "	" "	Having neglected to affix forms of any kind -	1 10 0	0 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London*—cont.	£ s. d.	£ s d.	
June 23	Paolo Rosinus, 46, Cromer Street, Gray's Inn Road.	Horace Smith, Esq., Clerkenwell Police Court.	Having neglected to affix in his workshop, the Abstract or other prescribed forms.	1 10 0	0 2 0	
July 3	Frederick Owles, dressmaker, 167–9, Brompton Road.	Albert de Rutzen, Esq., Westminster Police Court.	Having, on Friday, 26th May last, employed four women and one young person after 8 p.m., to wit, till 9.30 p.m., without having recorded the said overtime, or sent a register thereof.	5 0 0	1 0 0	
"	Simon Sobell, tailor, 26, Exeter Street, Brompton Road.	" "	Having employed four women on Saturday, 27th May, to 5.5 p.m.	2 0 0	0 16 0	Solicitor stated that man was very poor, and had been slack.
"	" "	" "	Having neglected to affix Abstract or other forms though requested.	0 10 0	0 2 0	
" 10	Madame Rigal, court dressmaker, 2, Thurloe Houses, South Kensington.	Albert de Rutzen, Esq., Westminster Police Court.	Having, on Friday, 9th June, employed 11 females from 8 p.m. to 10 p.m., without recording the overtime, or sending a register of the same as prescribed.	5 10 0	2 4 0	
"	Madame Rigal, court dressmaker, 19. Pelham Street, South Kensington.	" "	Having employed on Friday, 9th June, six females from 8 p.m. to 10 p.m., in like manner.	3 0 0	1 4 0	
"	Elise Pettit, dressmaker, 41, Sloane Street, S.W.	" "	Having, on Saturday, 10th June, employed four females after 4 o'clock, to wit, till 4.55.	2 0 0	0 16 0	
" 12	Lewis and Allenby, dressmakers, 193, Regent Street.	Alfred C. Plowden, Esq., Marlborough Street Police Court.	Having, employed on Friday, 16th June, seven females after 10 p.m., to wit, until 10.30 p.m.	Dismissed.	1 8 0	Mr. Plowden dismissed these cases, on the ground that because work did not begin before 9 a.m., they could legally work to 11 p.m. Case granted.

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London*—cont.	£ s. d.	£ s. d.	
July 12	Herbert Friday, tailor, 33, St. Ann's Court, Wardour Street.	Alfred C. Plowden, Esq., Marlborough Street Police Court.	Having employed a woman until 11.45 p.m. -	Dis-missed.	0 4 0	Mr. Plowden stated that it was monstrous to say that sweeping a floor was employment within the meaning of the Act. Case granted.
" 21	Defries and Son, glass illuminator, Church Row, Aldgate, E.	Alderman Newton, Guildhall	Having, on Saturday, 24th June, employed six females after 2 o'clock, to wit, until 6.15 p.m.	1 10 0	1 10 0	
"	" "	" "	Having, on Sunday, 25th June, employed one female from 11.30 a.m. to 8 p.m.	0 5 0	0 5 0	
"	" "	" "	Having, on Wednesday, 28th June, employed 10 females after 7 p.m., until 10 p.m.	2 10 0	1 12 0	
July 10, 17 & 24.	Madam Vivian, dressmaker, 34A, Harrington Road, South Kensington.	Albert de Rutzen, Esq., Westminster Police Court.	Having, on June 9th, employed a woman to 9.55 p.m., without sending register of overtime or recording the same.	Dis-missed.	0 4 0	Summons said to be informal.
July 24	" "	" "	Having, on June 9th, employed another woman likewise.	Ad-journed *sine die.*	0 4 0	This summons was not said to be informal, but adjourned *sine die.*
"	Duffield and Scott, dressmakers, 52, Ebury Street, S.W.	" "	Having no Abstract or other forms appertaining thereto affixed.	Dis-missed.	0 2 0	
"	" "	" "	Having on Friday, 23rd June, employed four female young persons after 8 p.m., up to 8.30 p.m., without sending register of overtime, or recording the same.	Dis-missed.	0 16 0	Summonses informal.

RETURN OF PROSECUTIONS.—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London—cont.*	£ s. d.	£ s. d.	
July 24	Madame Amelie, dressmaker, 7, Ebury Street, S.W.	Albert de Rutzen, Esq., Westminster Police Court.	Having, on Wednesday, 21st June, neglected to affix abstract or other forms.	Dismissed.	0 2 0	Informal summons. The word "prescribed" omitted in summons and information.
" 25	Madam Kerswell, dressmaker, 70, Grosvener Street.	J. Lennox Hannay, Esq., Marlborough Street.	Having, on Saturday the 24th June, employed seven females after 4 o'clock, up to 4.40.	1 3 0	1 8 0	
"	Madam Pontz, dressmaker, 27, Dover Street, W.	" "	Having employed a woman on the 14th June after 8, to 8.30, without sending register of said overtime, or recording the same.	2 0 0	0 4 0	
"	" "	" "	Having employed a woman and a young person till 9 p.m. on the 13th June.	Dismissed.	0 8 0	Declarations taken refuted on oath.
"	" "	" "	Having employed two other women on the 16th June after 8 p.m. until 8.40 p.m.	Adjourned.	0 8 0	Witness summonses not served; addresses incorrect; cannot be found.
" 26	Mrs. Pendleton, dressmaker, 27, Colville Terrace, Notting Hill.	Haden Corser, Esq., (Stipendiary), West London Police Court.	Not having Abstract affixed on Friday 14th July 1893.	0 10 0	0 2 0	
"	" "	" "	Illegal employment of a woman after 8 p.m. on same date.	1 0 0	0 4 0	
"	Eliza Hewitt, dressmaker, 106, Glenarm Road, Dalston.	J. R. W. Bros, Esq., North London Police Court.	Having, on Saturday, 1st July, employed a young person after 4 o'clock, to wit, until 5.10 p.m.	1 0 0	0 4 0	
" 27	Pratt Bros., dressmakers, Eldon House, Streatham.	James Sheil, Esq., Lambeth Court.	Having, on Saturday, 3rd June, employed five females after 4 o'clock, until 4.30.	5 0 0	1 0 0	12*s.* 6*d.* additional allowed to witnesses (2*s.* 6*d.* each).

RETURN OF PROSECUTIONS.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London*—cont.	£ s. d.	£ s. d.	
July 27	The Misses Christian, dressmaker, 136, Anerley Road.	James Sheil, Esq., Lambeth Court.	Having, on Friday, 16th June, employed six females after 8 p.m., to wit, till 10 p.m., without sending register of overtime or recording the same on Form No. 12.	0 10 0	0 4 0	On 1st case.
				[illegible] [illegible] 5	1 0 0	On five cases.
" 28	Simon Cohen, cap manufacturer, 4, Christopher Court, Commercial Road, E.	John Dickenson, Esq., Thames Police Court.	Having, on Sunday the 18th June, employed three females after 4 o'clock, to wit, until 6. 40 p.m.	3 0 0	0 8 0	Interpreter allowed, 7s. additional.
"	M. Kazanoski, 117, Back Church Lane, Commercial Road, E.	" "	Having, on Thursday, 8th June, employed a female before 8 a.m., to wit, at 7.35 a.m.	1 0 0	0 4 0	
" 31	Miss Godwin, dressmaker, 14, Garway Road, W.	A. C. Plowden, Esq., Marylebone Court.	Having, on Saturday, 1st July, employed three females up to 6.40.	1 10 0	0 12 0	
"	Misses Sims and Whittle, dressmakers, 12, Prince's Street, Cavendish Square.	" "	Having, on Saturday, 3rd June, employed one female after 4 o'clock, to wit, till 4.30.	0 10 0	0 4 0	
"	" "	" "	Having, on Saturday, 10th June, employed two females after 4 o'clock, to wit, till 4.30 p.m.	1 0 0	0 8 0	
Aug. 1	Charles Ginman, upholsterer, 120, Upper Richmond Road, Putney.	J. Sheil, Esq., Wandsworth Police Court.	Having neglected to affix a copy of the prescribed Abstract in his workshop, after two requests to do so.	1 0 0	0 4 0	
" 3	Eliza Johnson, dressmaker, 420, Clapham Road, S.W.	Geo. Lewis Denman, Esq., Wandsworth Police Court.	Having on the 14th June neglected to affix the prescribed Abstract of the Act and other forms in her workshop.	1 0 0	0 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London*—cont.	£ s. d.	£ s. d.	
Aug. 3	Eliza Johnson, dressmaker, 420, Clapham Road, S.W.	Geo. Lewis Denman, Esq., Wandsworth Police Court.	Having, on the 14th June, employed two females after 8 p.m., to wit, till 8.45 p.m., without having sent a register of the overtime nor recording the same.	2 0 0	0 8 0	5s. allowed to the witnesses in addition.
„ 4	William Starke, dressmaker, 88, High Street, Norwood.	Robert J. Biron, Esq., Lambeth Police Court.	Having, on Saturday, 24th June, employed two females after 4 o'clock, to wit, until 5.30 p.m.	0 6 0	0 8 0	
„	Miss Lawrence, dressmaker, 163, High Street, Norwood.	„ „	Having, on Saturday, 17th June, employed three females after 4 o'clock, to wit, until midnight.	0 11 0	0 12 0	Former conviction, 9th June 1888.
„ 5 (adjourned from Aug. 4.)	Wm. Wright, dressmaker, 19, Duke Street, Manchester Square.	W. M. Cooke, Esq., Marylebone Police Court.	Not having Abstract affixed on Saturday 8th July 1893.	0 10 0	0 4 0	
Aug. 8	Madame Haywood, dressmaker, 64, New Bond Street.	J. Lennox Hannay, Esq., Marlborough Street Police Court.	Having, on Friday, 23rd June, employed two females after the hour of 10 p.m., to wit, 10.35 p.m.	Dismissed.	0 4 0	It was proved that the dress upon which the females were working belonged to one of them, though they had worked to 10 p.m., overtime.
„	„ „	„ „	Having employed two females after 8 p.m., to wit, till 10 p.m., without having affixed Form 21, or recording the said overtime on Form 12.	5 0 0	0 6 0	
„	„ „	„ „	Having neglected to affix the prescribed Abstract of the Act and other forms.	2 0 0	0 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the District of H.M. Superintending Inspector of Workshops for the County of London—cont.	£ s. d.	£ s. d.	
1893.						
Aug. 8	Miss Hancock, dressmaker, 42, New Bond Street.	J. Lennox Hannay, Esq., Marlborough Stree Police Court.	Having neglected to affix the prescribed Abstract and other forms.	2 0 0	0 2 0	
"	Miss Hart, dressmaker, 42, New Bond Street.	" "	Having neglected to affix the prescribed Abstract and other forms.	3 0 0	0 4 0	
"	Nicolle & Co., dressmaker, 171, New Bond Street.	" "	Employment of two females after 4 p.m. on Saturday, 17th June.	4 0 0	0 8 0	
"	Miss Joyce, 16, Dover Street, W.	" "	Neglecting to affix Abstract and other documents required by the Act to be affixed.	3 0 0	0 2 0	
" 9	Robert White & Co., brewers, trading as Kop's Brewery Co., Town Mead Road, Fulham.	Haden Corser, Esq., Stipendiary, West London Police Court.	(1.) Employing a woman after 8 p.m. on Monday, 26th July 1893, without sending notice of overtime to H.M. Inspector.	1 0 0	0 9 0	
"	" "	" "	(2.) Employing a woman after 8 p.m. on Tuesday, 27th June 1893, without entering particulars of overtime in Form 12.	1 0 0	0 9 0	
"	Derry and Thorne, dressmakers, 101/13, High Street, Kensington.	" "	Having, on Friday, 9th day of June, employed seven females after 8 p.m. without affixing Forms 21 or 12.	1 15 0	1 8 0	It was proved here by production of registers that two books, No. 40, were in use.
"	Bradley & Co., 129/31, Westbourne Grove, W.	" "	Having employed five women on Saturday, 3rd June, after 4 p.m., to wit, until 4.48.	2 10 0	0 16 0	
"	" "	" "	Having on said day neglected to affix the prescribed Abstract and other forms in the workshop.	0 10 0	0 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the District of H.M. Superintending Inspector of Workshops for the County of London—cont.			
1893.				£ s. d.	£ s. d.	
Aug. 9	Miss Cockett, 2, Portland Place, Hammersmith, W.	Haden Corser, Esq., Stipendiary, West London Police Court.	Having employed a child of the age of 12 years, as a full-timer on the 15th June and previously.	1 0 0	0 8 0	
„ 11	Fletcher and Lockwood, dressmaker, 36, South Audley Street.	R. M. Newton, Esq., Marlborough Street Police Court.	Having, on Thursday, 22nd June, neglected to affix the prescribed Abstract and other forms.	1 10 0	0 6 0	
„	Mrs. Coke, dressmaker, 339, Oxford Street, W.	„ „	(1.) Failing to affix Abstract on Saturday, 29th July 1893.	1 0 0	0 2 0	
„	„ „	„ „	(2.) Illegal employment of three women after 4 p.m. on same date.	3 0 0	0 12 0	
„ 15	Sir A. Harris, stage costumier, Covent Garden Theatre.	James Vaughan, Esq., Bow Street Police Court.	Having, on Wednesday, 19th July 1893, employed seven women after the hour of 10 p.m., to wit, 12.25 midnight, in the handicraft of theatrical costume making, &c.	Dismissed.	1 8 0	
„	„ „	„ „	Having neglected to affix in his workroom the prescribed Abstract of the Act.	Dismissed.	0 2 0	
„ 18	Nathan Freedman, tailor, 12, The Mount, Whitechapel.	Fredk. Mead, Esq., Thames Police Court.	Having employed two females on Thursday after 8 p.m., without sending notice of overtime and recording it.	3 0 0	0 8 0	
„	Jacob Abraham, 32, Mile End Road.	„ „	Having employed one young person after 8 p.m., on Thursday, 27th July, upon overtime without recording the same.	3 0 0	0 4 0	
„	Madame Perry, dressmaker, 19, Baker Street.	A. C. Plowden, Esq., Marylebone Police Court.	Having on Saturday, 22nd July, employed a woman after 4 p.m., to wit, till 5.30 p.m.	0 10 0	0 4 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.			*In the District of H.M. Superintending Inspector of Workshops for the County of London*—cont.	£ s. d.	£ s. d.	
Aug. 18	Madame Perry, dressmaker, 19, Baker Street.	A. C. Plowden, Esq., Marylebone Police Court.	Also for having neglected to affix the Abstract in her workroom.	0 2 6	0 2 0	
„ 29	Fredk. Cogswell, tailor, 9, Donell Place, Brixton Road.	A. A. Hopkins, Esq., Lambeth Police Court.	Having employed a young person after the hour of 4 p.m., on Saturday, 8th July, to wit, till 8.45 p.m.	1 0 0	0 6 0	Second visit after caution hereon.
„	„ „	„ „	Having neglected to affix the prescribed Abstract which was sent to him.	0 2 0	0 2 0	
Sept. 4	Duffield and Scott, dressmakers, 52, Ebury Street, W.	A. de Rutzen, Esq., Westminster Police Court.	Having, on 23rd June 1893, employed four young persons after 7 p.m.	0 10 0	0 8 0	Costs of summonses not allowed, as these cases had been dismissed on 24th July.
„	„ „	„	Two cases dismissed - - -	- -	0 8 0	
„	„ „	„ „	Having no Abstract affixed on Saturday, 24th June.	0 5 0	0 2 0	
„	Madame Vivian, dressmaker, 34A, Harrington Road, South Kensington.	„ „	Having, on June 9th, employed two females after 8 p.m., to wit, till 9.55 p.m., illegally.	0 10 0	0 8 0	Costs of summonses not allowed, as cases had been previously dismissed.
„	Madame Amelie, dressmaker, 7, Ebury Street.	„	Having neglected to affix the prescribed Abstract of the Act.	0 5 0	0 2 0	Costs of summons not allowed, as case had been dismissed on 24th July, though a plea of guilty was then taken.
„ 27	William Clarke, firewood cutter, 44, Vauxhall Walk, Lambeth.	Robt. J. Biron, Esq., Stipendiary, Lambeth Police Court.	Failing to affix Abstract of the Act - -	0 5 0	0 2 0	

RETURN OF PROSECUTIONS—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
			In the District of H.M. Superintending Inspector of Workshops for the County of London—cont.			
[illegible]				£ s. d.	£ s. d.	
Sept. 27	William Clarke, firewood cutter, 44, Vauxhall Walk, Lambeth.	Robt. J. Biron, Esq., Stipendiary, Lambeth Police Court.	Employing two young persons after 4 p.m. on Saturday.	0 10 0	0 10 0	
Oct. 18	J. Woolnough, milliner, 48, St. John's Road, Battersea.	G. L. Denman, Esq., Stipendiary, South-Western Police Court.	Employing a woman after 8 p.m. without sending a report to H.M. Inspector, or entering the overtime on the prescribed record.	1 0 0	0 5 0	
„ 19	Mrs. Evan Williams, milliner, 24, Knight's Hill, Norwood.	Robt. J. Biron, Esq., Stipendiary, Lambeth Police Court.	1. Failing to affix Abstract of the Act - -	0 2 0	0 2 0	
„	„ „	„ „	2. Employing a woman after 2 p.m., *i.e.,* till 5.10 p.m. on Saturday.	0 2 0	0 5 0	
„	Walter Huvlock, milliner, 41, Walworth Road.	„ „	Employing a woman after 2 p.m. on Saturday, *i.e.,* until 9.55 p.m.	0 2 0	0 5 0	
„ 20	James Benton, 61, Orwell Road, Bromley-by-Bow.	John Dickenson, Esq., Stipendiary, Thames Police Court.	Failing to cause his child, whilst employed in a workshop, to attend school.	0 4 0	0 4 0	Child obtained employment by altering date of birth on certificate.
„ 27	Mrs. Caroline Hunt, boot machinist, 18, Totty Street, Old Ford.	H. J. Bushby, Esq., Stipendiary, Worship Street Police Court.	Employing two women after 7 p.m. - -	2 0 0	0 8 0	

INFORMATION LAID UNDER THE COTTON CLOTH FACTORIES ACT, 1889.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
				£ s. d.	£ s. d.	
1893. Mar. 2	John Southworth and Sons, cotton manufacturers, Brook Mill, Clitheroe.	The Mayor, and W. B. Dewhurst, J. H. Clark, J. A. Parker, A. Roberts, S. Speak, and R. Harrison, Esqs., Court House, Clitheroe.	Neglecting to keep standardised hygrometer in working order as prescribed, the same being a repetition of similar offence within 12 months after statutory notice.	4 6 0	0 14 0	After the case had been proved, the defendants' solicitor suggested I should accept costs as sufficient penalty, and the Bench, after retiring, made the same suggestion, which I declined; after a second retirement, they convicted in the lowest penalty *to include costs.*

INFORMATIONS LAID UNDER SECTION 24 OF THE FACTORY AND WORKSHOP ACT, 1891.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
				£ s. d.	£ s. d.	
1892. Nov. 10	Wilson and Tattersall, cotton manufacturers, Salford Bridge Mills, Clitheroe.	W. B. Dewhurst, J. H. Clark, James H. Foden, and Saml. Speak, Esqs., Clitheroe Borough Police Court.	Not supplying three weavers with sufficient particulars to enable them to ascertain the rate of wages they were entitled to be paid.	0 3 0	2 7 0	Penalty 1s. and costs in each case.
Dec. 14	R. and R. Haythornthwaite, cotton manufacturers, Spring Hill Steed, Burnley.	F. J. Grant, Esq., Dr. Parson, and C. Holden, Esq., Burnley Boro' Court.	Not supplying two weavers with particulars sufficient to enable them to ascertain the rate of wages they were entitled to be paid.	0 10 0	0 17 6	Penalty 10s. in one case, and costs in the other.
1893. Jan. 18	The Victoria Mill Co., Limited, cotton manufacturers, Victoria Mill, Burnley.	Geo. Sutcliffe, Geo. Walmsley, A. Lancaster, and J. Witham, Esqs., Boro' Police Court, Burnley.	Not supplying weavers with sufficient particulars to enable them to ascertain the rate of wages they are entitled to be paid.	- -	0 15 0	Ordered to pay costs.
"	The Burnley Self Help Cotton Spinning and Manufacturing Co., Healey Royd Mill, Burnley.	" "	Same as above - - - - -	- -	0 15 0	

INFORMATIONS LAID UNDER SECTION 24 OF THE FACTORY AND WORKSHOP ACT, 1891—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.				£ *s.* *d.*	£ *s.* *d.*	
Jan. 30 (Adjourned from Jan. 9.)	William Thompson, cotton manufacturer, Boundary Mill, Blackburn.	F. Thomas, W. E. Hamer, J. W. Steries, and Wm. Boyle, Esqs., Blackburn Boro' Court.	Not supplying one winder and two weavers with sufficient particulars with their work to enable them to ascertain the rate at which they were entitled to be paid for their work.	2 0 0	8 4 0	40*s.* and costs in one case, other two dismissed with costs against plaintiff. Defendant's costs allowed, 10*l.* 11*s.* 6*d.*
June 15	S. Knowles, Hill Side Mill, Darwen.	The Mayor, Councillor Cocker; Joseph Eccles, Geo. Brindle, Esqs., and three others, Darwen Borough Petty Sessions.	Failing to supply particulars of work in accordance with section 24 of the Factory and Workshop Act, 1891, to three weavers in his employ.	1 10 0	1 13 0	Penalty of 10*s.* and costs in each of the three cases.
„ 20	Wilfred and Johnson, Calderbank Shed, Dewsbury.	Dr. Inchcliffe; A. H. Pyrah, Geo. Day, and G. Hallewell, Esqs., Dewsbury Boro' Bench.	Failing to supply, on 9th May 1893, eight weavers in their employ, and paid by the piece, with particulars of work in accordance with section 24 of the Factory and Workshop Act, 1891.	Dismissed.	—	
July 15	William Helm & Co., Bridge Mills, Nelson.	William Tunstile and John Whittaker, Esqs., Nelson Boro' Police Court.	Not supplying four weavers in their employ, and paid by the piece, with particulars of work, contrary to section 24 of the Factory and Workshop Act, 1891.	1 0 0	2 4 0	
„ 26	James Cockshutt, cotton manufacturer, Stanhill, Oswaldtwistle.	Adam Dugdale, Mitchel Eccles, Eli Heyworth, and F. Openshaw, Esqs., County Police Court, Blackburn.	Not supplying two weavers with particulars with their work in accordance with section 24 of the Factory and Workshop Act, 1891.	3 0 0	1 4 0	20*s.* and costs in first case, and 40*s.* and costs in second case.
Aug. 2	Hopkin, Martin, & Co., St. Paul's Road, Preston.	Henry Sourbutts, Edward Greenwood, and John Satterthwaite, Esqs., Boro' Police Court, Preston.	Failing to supply two winders with correct particulars of their work, contrary to section 24 of the Factory and Workshop Act, 1891.	1 5 0	1 0 0	5*s.* and costs in first case, and 20*s.* and costs in second case.

INFORMATIONS LAID UNDER SECTION 24 OF THE FACTORY AND WORKSHOP ACT, 1891—*continued.*

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.				£ s. d.	£ s. d.	
Oct. 16	The Greenbrook Manufacturing Co., Limited, cotton manufacturers, Jubilee Mill, Padiham.	Col. Starkey, Geo. Sutcliffe, Wm. Dugdale, John Baron, and James Stephenson, Esqs., County Police Court, Burnley.	Not supplying two winders with particulars of work in accordance with section 24 of the Factory and Workshop Act, 1891.	1 0 0	1 9 0	Penalty 20*s.* and costs in first case, and costs in the second.
"	The Church Street Manufacturing Co., Limited, cotton manufacturers, Holme Mill, Padiham.	" "	Not supplying four weavers with particulars of work in accordance with section 24 of the Factory and Workshop Act, 1891.	1 0 0	2 8 0	Penalty 20*s.* and costs in first case, and costs in other three.
" 21	The Nelson Manufacturing Co., Limited, Seed Hill Mill, George Street, Nelson.	John Whittaker and Leonard Clement, Esqs., Nelson Boro' Police Court.	Not supplying four weavers in their employ with correct particulars of work in accordance with section 24 of the Factory and Workshop Act, 1891.	1 10 0	3 10 0	Penalty in first case 1*l.* 10*s.* and costs, and costs in the three others.

INFORMATIONS LAID UNDER THE TRUCK ACTS.

Date.	Names and Addresses of Persons summoned.	Names of the Magistrates who heard the Case, and Place of Hearing.	Nature of the Offence.	Amount of Penalty.	Amount of Costs.	REMARKS.
1893.				£ s. d.	£ s. d.	
July 31	William Goodacre and Sons, mat manufacturers, Victoria Dock Road, S.E.	— Baggallay, Esq. (Stipendiary), West Ham Police Court.	Failing to pay to a woman in their employment the entire amount of wages earned on Saturday, 15th July 1893, in current coin of the realm.	- •	0 5 6	
"	" "	" "	Failing to pay to a woman in their employment the entire amount of wages earned on Saturday, 22nd July 1893, in current coin of the realm.	• •	0 5 6	

Appendix No. 5.

Summary of the Total Number of Prosecutions and Convictions, or other results, during the Twelve Months ended the 31st October 1893.

Particulars of Offences.	Number of Prosecutions.	Number of Convictions.	Number of Cases Withdrawn.	Number of Cases Dismissed.	Total Amount of Penalties.	Total Amount of Costs.
Insanitary and Uncleanly Conditions.					£ s. d.	£ s. d.
Neglecting to limewash	43	42	1	—	—	—
Allowing factory or workshop to be overcrowded	4	4	—	—	5 1 0	1 8 6
Not keeping factory or workshop in cleanly condition	4	4	—	—	4 7 6	1 14 2
Not keeping factory properly ventilated	1	1	—	—	0 1 0	0 6 6
Danger from Machinery, &c.						
Neglecting to fence	139	132	5	2	—	—
Allowing children to clean machinery in motion, or to work between the fixed and traversing parts of a machine in motion	11	10	—	1	3 17 6	6 12 0
Employment of Classes of Persons forbidden by Law.						
Under 14 without school certificates, or under 16 without surgical certificates	365	356	4	5	—	—
Employment of Women and Children in forbidden Trades.						
Girls in brickfield	4	3	—	1	2 10 0	2 5 0
Young person in a white lead works	1	1	—	—	0 5 0	0 14 0
Child in a glass works	1	1	—	—	1 0 0	0 15 6

SUMMARY of the TOTAL NUMBER of PROSECUTIONS and CONVICTIONS—*continued.*

Particulars of Offences.	Number of Prosecutions.	Number of Convictions.	Number of Cases Withdrawn.	Number of Cases Dismissed.	Total Amount of Penalties.	Total Amount of Costs.
					£ s. d.	£ s. d.
Illegal Hours or Times of Employment.						
Before or after the legal hour - - - - - - -	261	245	5	11	—	—
At night - - - - - - - - - -	24	23	—	1	83 2 0	19 5 4
During meal times or without proper interval for meals - - - -	125	117	2	6	—	—
Beyond legal hours on Saturday or day substituted - - - - -	151	144	3	4	—	—
On Sundays, holidays, or children on successive Saturdays - - - -	21	19	1	1	23 17 0	17 4 3
(Children) full time or otherwise than in morning and afternoon sets, &c. - -	54	51	2	1	—	—
Neglecting Rules, as to Registers, Abstracts, Notices, &c.						
Not keeping registers - - - - - - -	140	133	5	2	—	—
Making false entry in register as to young persons employed - - - -	3	3	—	—	7 5 0	2 11 8
Not keeping prescribed lists of outworkers - - - - - -	4	4	—	—	2 0 0	0 18 0
Not affixing or properly filling up notices and abstracts - - - -	405	380	16	9	—	—
Not specifying on Abstract period of employment and meals - - - -	10	10	—	—	9 3 6	5 16 4
Not sending notice of Accident - - - - - - -	34	32	—	2	—	—
Not sending other prescribed notices - - - - - - -	156	147	5	4	—	—

SUMMARY of the TOTAL NUMBER of PROSECUTIONS and CONVICTIONS—*continued.*

Particulars of Offences.	Number of Prosecutions.	Number of Convictions.	Number of Cases Withdrawn.	Number of Cases Dismissed.	Total Amount of Penalties.	Total Amount of Costs.
					£ s. d.	£ s. d.
Prosecution of Parents	15	13	2	—	6 8 0	5 14 0
Obstructing an Inspector in the Execution of his duty	4	4	—	—	4 10 0	3 9 0
Falsely pretending to be an Inspector	1	1	—	—	5 0 0	2 0 6
***Prosecution under Cotton Cloth Factories Act,* 1889.**						
Not keeping instruments in proper working order	1	1	—	—	4 6 0	0 14 0
***Prosecutions under Section 24 of the Factory and Workshop Act,* 1891.**						
Not supplying sufficient or correct particulars	13	12	—	1	12 18 0	26 6 6
Prosecutions under the Truck Acts.						
Failing to pay entire amount of wages in current coin	2	—	—	2	—	—

APPENDIX No. 6.

RETURN MADE IN PURSUANCE OF SECTION 19 OF THE FACTORY AND WORKSHOP ACT, 1891, OF PERSONS INSPECTED WITH THE RESULTS OF THE INSPECTION DURING THE TWELVE MONTHS ENDED 31ST OCTOBER 1893.

—	Number Examined.	Number Rejected.
Young Persons:		
Male	133,672	2,017
Female	101,922	1,268
Children		
Male	29,720	597
Female	28,394	582
TOTALS	293,708	4,464

REASONS FOR REJECTION.

Anaemia and Heart Disease.	Diseases or Loss of the Eye.	Diseases of Ear, Nose, and Throat.	Diseases of the Chest.	Diseases of the Skin.	Scrofula and Diseases of Bones of Limbs.	General Debility.	Unclean-liness.	Un-classified Physical or Mental Defects.	Various Causes other than Physical or Mental.
116	323	74	74	268	47	241	129	240	2,952*

* These rejections were largely due to non-production of the documents required under the Factory and Workshop Act. Many of the young persons and children rejected for his reason subsequently produced the required documents and were accordingly passed.

Appendix No. 7.

Accidents Reported to H.M. Chief Inspector of Factories by Certifying Factory Surgeons during the Twelve Months ended 31st October 1893.

The only accidents to be reported are the following :—

(*a*.) Any accident which causes loss of life to any person employed in the factory or the workshop ; and

(*b*.) Any accident which causes bodily injury to a person employed in the factory, and is produced either by machinery moved by steam, water, or other mechanical power, or in the factory or the workshop caused through a vat, pan, or other structure filled with hot liquid or molten metal or other substance, or by explosion, or by escape of gas, steam, or metal, and is of such a nature as to prevent the person injured by it from returning to his work in the factory or workshop, and doing five hours work on any day during the next three days after the occurrence of the accident.

Nature of Injury.	Adults (over 18).		Young Persons.		Children.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.&F.
Causing death	333	9	66	9	4	1	403	19	422
Amputation of right hand or arm	31	3	20	5	1	—	52	8	60
Amputation of left hand or arm	19	4	16	2	—	1	35	7	42
Amputation of part of right hand	256	68	200	83	25	10	481	161	642
Amputation of part of left hand	283	47	181	55	20	8	484	110	594
Amputation of any part of leg or foot	32	2	13	3	—	—	45	5	50
Loss of sight of one or both eyes	19	7	2	2	—	3	21	12	33
Fracture of limbs or bones of trunk	199	21	119	20	11	—	329	41	370
Fracture of hand or foot	251	47	128	50	10	3	389	100	489
Injuries to head and face	411	68	101	57	9	6	521	131	652
Lacerations, contusions, and other injuries not enumerated above	2,347	420	1,497	389	131	48	3,975	857	4,832
Total	4,181	696	2,343	675	211	80	6,735	1,451	8,186

FOURTEENTH REPORT

OF THE

INSPECTOR OF RETREATS,

UNDER

THE INEBRIATES ACTS, 1879 AND 1888,

FOR THE YEAR 1893;

WITH

APPENDIX.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
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Fourteenth Report of the Inspector of Retreats, under the Inebriates Acts, 1879 and 1888, for the year 1893.

SIR, Home Office, 31st July 1894.

I HAVE the honour to submit my Fourteenth Annual Report upon the eight Retreats licensed under the Inebriates Acts during the year 1893, to which is appended a copy of the rules approved by the Secretary of State for their management.

1. In the subjoined schedule the names and situations of these establishments, the names of the Licensees, and other particulars are set forth.

2. The licenses of the six establishments existing during the year 1892 were all renewed, and the two new Retreats to which I alluded in my last Report were duly opened with the approval of the Justices during the year now reported on.

Both Daisy Bank and Kingswood Park are situated in high and healthy positions, and are well suited in all respects for the purpose intended. I should point out that in the case of Kingswood Park the Justices made it one of the conditions of the license that they should have the right to inspect the premises at all times. I venture to think that this example might be followed with advantage by other licensing authorities.

3. With regard to the general condition of these establishments I have had no fault to find as a rule, and the health of the patients has been very satisfactory on the whole. I have no death to record.

4. There has again been a slight increase in the total number of patients admitted to the various Retreats during the year. In 1891 and 1892 the admissions were 115 and 124 respectively, but in 1893 the number rose to 129.

5. In answer to my invitation the Licensees of the following Retreats have furnished me with observations as to the working of the Acts, and the result of treatment.

Fallowfield.—" The Manchester Retreat for Inebriate Women was opened July 24th, " 1890, in accordance with the provisions of the Inebriates' Acts of 1879–88. These " Acts encourage the opening of Retreats, either for male or female inebriates, to be " conducted only by licensed Managers, and subject to the approval, and open always " to the visits, of an inspector appointed by the Crown. In fact the law regards the " treatment of habitual drunkards as somewhat analogous to that of lunatics, viewing " their malady mainly as a physical disease. And such it unquestionably is. But it " is a moral disease also, which needs moral as well as physical remedies, and the " successful cure of inebriety will depend on the care and skill with which these " moral and spiritual remedies are applied by the Managers and Committees of " Retreats.

" The law, however, concerning the detention of inebriates differs at present from " the lunacy laws in two important particulars. In the first place, it makes no " provision for the support of Retreats, except from the payment of inmates. The " attempt, therefore, to rescue poorer persons and wean them from inebriety is wholly " left to private benevolence. Now this has from the first been a prominent aim of " the promoters of the Manchester Retreat. The Grove receives two classes of patients. " One class consists of women of a certain social position, who pay readily for their " maintenance. These live apart in the better rooms, and are encouraged to occupy " themselves in their favourite pursuits, whether drawing, or painting, or the art of " the needle. But a larger number are working women, who pay at lower rates, " according to their means, or even nothing; they employ themselves in the necessary " work of the household. As far as possible the Retreat is made self-supporting by " means of the work and the payments of the inmates. But the admission of poorer " women — sometimes *gratis*, and at the suggestion of the magistrate before " whom they have been brought for trial, and as an alternative to the gaol — " makes the maintenance of the Grove dependent in part upon the generosity of " subscribers.

"In the second place, the Inebriates Acts give no power to anyone to commit a "patient to a Retreat without the patient's own desire. They may be committed to "gaol for being drunk and disorderly, and are so committed for short periods "hundreds of times over, to the mockery of justice and to the vast expense of the "nation, but absolutely without any good result. In entering a Retreat, however, "everything is left to the inebriate. Upon being certified to be an inebriate by two "witnesses (who must neither be managers of a Retreat, nor immediate relations of "the patient), he or she may make application to two justices of the peace, and so "obtain admission. Once admitted, indeed, the patient is compelled to remain for a "whole year. But the mode of obtaining admission is so cumbrous, and leaves so "much to the perverse and capricious will of the drunkard, that in practice we find "very few applicants proceed so far as to gain admission, and precisely the most "distressing cases are those for whom the law provides no help.

"These and other practical difficulties have pressed so hard upon those who have tried "to work the Acts, and have so greatly struck all who have watched their operation, "that in 1891, while the Government of Lord Salisbury was in power, Lord Herschell "moved for a Commission of the Home Office to inquire into the working of the "Inebriates Acts. That Committee has recently issued its report. ('Report from the "Departmental Committee on the Treatment of Inebriates, 1893;' price, 1½*d.*) Its "recommendations are strongly in the direction pointed out by practical experience, "and may be summarised as follows:—

"The number of Retreats now existing is ridiculously small in proportion to their "need.

"The mode of application for admission should be greatly simplified.

"Power should be given to compel a confirmed inebriate to enter a Retreat, when "the person will not enter voluntarily.

"Industrial Retreats for poorer inebriates should be provided out of public funds.

"The present short-sentence system of punishing drunkenness should be superseded "by giving power to magistrates to commit to an Inebriates Retreat.

"It is certain that the number of habitual drunkards of both sexes in the kingdom "is so large as to constitute not only a grave scandal, but a serious burden upon the "community, and, above all, a frightful source of misery to many thousands of house-"holds. It is estimated that there are at this moment 6,000 inebriate women in "prison—not to speak of men similarly detained, nor of the crowds of both sexes "whom drink has brought either to the workhouse or the asylum, and quite apart "from the far larger number of habitual drunkards outside of such places, who are "free to indulge their fatal craving, and to be the daily and hourly scourge of their "homes.

"No patient should be detained in a Retreat which is not conducted under statutory "conditions, and open at all times to Government control. To deal, then, with this "pressing evil is well worthy of the social reformer and of the statesman. Happily, "the British Medical Council is taking vigorous steps to urge upon Government the "necessity of giving effect to the recommendations of the Commission, and the "present Home Secretary (Mr. Asquith) has declared himself entirely favourable to "the suggestion. It remains for every social reformer to push the matter forward.

"It is obvious also to the 'plain man' that we must not only aim at the adequate "treatment of our present inebriates, but we must also prevent their manufacture. "There must be a vast diminution of the drinking customs of the people, and a "sweeping reduction of the licensed temptations to drinking. As long as the liquor-"traffic goes as now, every patient we send out as cured is at once confronted with "temptations so great as to be almost overwhelming.

"It is a matter for deep thankfulness that reform in this respect is now felt by all "good men and women to be of pressing importance. And we may see in the Liquor "Traffic (Local Control) Bill of the present Government a gratifying assurance that "vigorous legislation cannot long be delayed.

"In the meantime, in spite of the difficulties caused by the insufficiency of the Acts "on the one hand and by the prevalence of temptations on the other, the work of the "Manchester Retreat has gone steadily on. Of the eight Retreats at this moment "licensed under the Act, the Grove is considerably the largest. It is certainly second "to none in pleasantness of surroundings (an important element in the treatment of "inebriates) and in efficiency of management. It is licensed for 25 patients, whom

" it receives from any part of the kingdom. It has been always full, or nearly so, " and it has during the three and a half years of its existence produced results which " amply justify the hopes of its founders, and repay the outlay of money and unceasing " care that has been spent upon it. There are many who regard the case of an habitual " drunkard as hopeless, and especially if the drunkard be a woman. We shall be " asked, what is our per-centage of cures? And if we speak of any such, we shall be " met with the objection that time alone can prove whether the recovery is real. We " are ready to confess that nearly half of those who leave us apparently cured do " relapse. But amid such temptations as surround them this is scarcely strange; nor " can we forbear reflecting upon the criminal folly of husbands, who, when they bring " their wives to us assure us that they would do anything in the world for their " recovery, and then, when the wife goes back again a changed woman, refuse to " become abstainers themselves, or to assist the wife's resolution by clearing the drink " out of the house. The most striking fact to many minds will be that so many " remain stedfast. Among the relapsed it is no uncommon thing for a woman to " implore us to re-admit her for a further period of treatment. And even without " this, the memory of a year spent in wholesome and godly living, in the punctual " discharge of duty, and in a pure and elevating moral atmosphere, is found to be a " powerful aid to repentance, self-control, and endeavour after a better life.

" Putting aside cases where we have no recent information, we can point to at least " five women who left us, after a year's stay, in 1891, and to at least six who left us " in 1892, who are now doing excellently well, either at the head of their own " families or in responsible situations, and who, so far, give promise of lasting and " radical cure. A few figures will show the amount of work done in 1893:—

" Number of applications or inquiries received - - -	113
" Number admitted (7 at the higher and 18 at the lower scale of " charges) - - - - - - -	25
" Number who left after 12 months' treatment - - -	21
" Number who left after more than 12 months - - -	2
" (These stayed on at their own desire.)	
" Number who left after less than 12 months - - - -	5

" (The reasons why these left were various. Two left through ill-health, one to go " to a dying mother, and two appeared unmanageable.)

" As a rule, those who have been with us under a year immediately relapse. The " physical crave has hardly died out, and new habits of life have not become " established.

" The highest fee paid is two guineas per week; the lowest is nil. We receive no " case after 50 years of age. The youngest patient in the Retreat is 23."

Kingswood.—" Our experience of the working of the Inebriates Acts has been " sufficiently long to warrant us in saying that their provisions are totally inadequate " for the successful treatment of patients who are admitted into the Retreats under " these Acts; and the small measure of authority or power given to the Licensees is " insufficient in order that they may cope with refractory patients; therefore when " that authority or power can, and has to be occasionally exercised, the lengthy pro- " ceedings requisite act as a bar to its successful issue. Leave of absence has " occasionally to be granted to patients, but unfortunately this course causes a great " deal of dissatisfaction to patients remaining in the Retreats, who are always ready " to bring forward an excuse in order to get their liberty, if only for a short period.

" We think section 19 could be so far altered and extended as to prevent disturb- " ances which do and must necessarily arise between the patients and Licensees under " the existing law, and we would suggest that the time for which a patient is away on " 'leave of absence' should not be reckoned as a part of the time of his detention in " the Retreat; we think such an alteration would tend to the speedy return of the " patients, thereby more effectually aiding the Licensees in the curative treatment of " such patients.

" The magisterial signatures to be obtained for the admission of a patient under " the Inebriates Acts offer a great barrier to many who wish to avail themselves of " the opportunity to be so admitted, causing, as the patient deems, too much publi- " city, and the friends loss of time and unnecessary expense, especially where the " Retreat is situated in a rural district.

"Although 11 patients have been admitted into this Retreat during the nine months "ending the year 1893, still we consider the voluntary system at present in force "only deals with those inebriates who are compelled by their friends from force of "circumstances to enter a Retreat, and does not in any way affect those whose pecu-"niary position allows them to be independent. We feel sure that until a compulsory "law is adopted, inebriety cannot be coped with with any degree of satisfaction. "Under this law only can we hope to deal with patients in the early stage of the "disease, thereby greatly facilitating the chances of a permanent cure, and raising "the present low standard of successful cases."

Rickmansworth.—"In reply to your query with regard to the working of the Acts "it is difficult to add any suggestion of practical value to the admirable notes taken "by the Departmental Committee appointed to investigate the question. The main "points requiring attention came out strongly in evidence before that Committee and "were duly embodied in a report which we trust will result in early legislative "measures. There can be no doubt of the advisability of some more satisfactory "method of dealing with *criminal* inebriates, the present police court procedure in "connexion with this class has proved an utter failure from every standpoint. "Experience has shown abundantly that little or no benefit accrues from a short "punitive confinement in prison, or from short periods of residence in insane asylums. "The desire for liquor is only increased by temporary seclusion, and the prisoners on "release soon fall easy victims to their previous habits. Of late the repeated expres-"sions of opinion from magistrates and parochial boards have added force to the "long recognised fact of their inability to cope with the condition, and of the urgent "need for the establishment of suitable public retreats for the reception and care of "such cases. With regard to the *non-criminal* inebriate, the consensus of opinion is "strongly in favour of a wider scope and more extended application of the present "Acts. Although existing enactments have been of inestimable value in opening out "future possibilities, they have on the whole proved inefficient and much too limited "to embrace the large majority of those for whose benefit they were framed. The "absence of compulsory committal has been a greater bar to a universal application "and consequent successful working of the Acts. They have perforce depended on "two unknown quantities (1) an inebriate's volitionary power; and (2) his recognition "and appreciation of the necessity for improvement. In too many instances these "conditions are absent; in others present in a modified degree but weak and "ineffective. The enormous majority of drinkers who cannot be induced to sign the "'Request for Reception"—however necessary such a proceeding may be in the "interests of all concerned—are at present out of the jurisdiction of the Acts. Again, "when an inebriate does consent to enter a Retreat, there are unnecessary, obnoxious, "and debarring difficulties placed in the way of admission; some modification of "procedure is urgently needed in this direction. Out of the 344 cases discharged "from the Dalrymple Home, 185 were admitted as private patients on their own simple "signature of a contract, no more difficulty has been experienced in dealing with "these cases (although under exactly the same regulations) than with patients under "the Acts. I am thoroughly conversant with the stock objections to a simple contract "admission under the Act of purely voluntary cases, but, after 10 years practical "experience, I still fail to see why a patient making personal application, accompanied "by a declaration by two friends, should require further difficulties placed in the way "of immediate admission. The declaration by friends, on oath if need be, the patients "voluntary entrance into the Retreat, his signature of a document, regular inspection "by Government officers, and ample facilities for public investigation, would, taken "together, effectually prevent abuse.

"The limitation of the Acts to the fairly well-to-do, and their inadaptability to "pauper cases is obvious and needs no further comment.

"A point requiring emphasis is the inadequate period allowed by patients for "recovery, reference to the above-mentioned particulars of discharged cases will show "that out of 344 cases only 69 remained for the full period allowed by the Act, or "about one-fifth of the total number, whilst on the other hand 148 entered for three "months, a term much too short to be of any permanent value in the large majority "of cases. Many of these cases previous to admission had been drinking steadily "for years, and sent to a home as a 'dernier resort,' broken down in health, with "symptoms of more or less permanent nervous and physical disease, to be renovated, "cured of their drinking habit, and turned out sober healthy men in three months.

"To those who know anything of the slow recovery from chronic lesions in alcoholism, "neuritic and physical, the reason of failure in many cases is obvious.

"To be effectual, legislative measures must be on a broader and more liberal basis; "(1.) To include power of committal by justices of criminal inebriates to special "institutions for detention and curative treatment. (2.) To apply more completely "to *non-criminal* inebriates in so far as to maintain a voluntary section, which should "be as purely voluntary and free from objectionable procedure as possible; and "compulsory powers applicable to those cases who—although incapable of managing "themselves or their affairs—are still unwilling to place themselves under protection "and curative influence. (3.) Provision for the poorer classes. (4.) Safeguards "should be provided amply sufficient for the protection of the liberty of the subject, "and all interests bearing upon the individual, his relatives, and the public. Finally, "all legislative provisions should be framed with the object of treating a morbid, "mental condition, this principle forms the basis of the whole question. Typical "inebriety is a diseased condition closely allied to, if not an actual form of, insanity. "The craving for liquor in an inebriate is an impulse as strong as that in the klepto-"maniac or suicidal monomaniac. The degeneration of simple inebriety into pure "accepted forms of lunacy, and the frequent history of insanity in the progenitors of "inebriates are evidences which strongly support an opinion the result of clinical "observation."

Twickenham.—"The number of patients taking advantage of the Act here is about "one-tenth of the total admissions, and this, notwithstanding that we try when "consulted to get the patients to come under the Act. Doubtless this will not be the "case when the mode of signing before the Justices is simplified. Again, there are a "very large number of inquiries from patients and their friends who eventually fail "to enter any Retreat at all, and these cases will be met when measures of compulsion "under certain circumstances are in force, and when Retreats are established wherein "patients with limited means can be received. Of our admissions half of them are in "the married state and half unmarried, and the majority are hard workers and not "the lazy drones many people would have us believe. The most important fact to "which attention should be called is the number of occasions in which the inebriate "patient is the victim of chronic physical disease. Fully 50 per cent. of our ad-"missions are suffering from disease other than and in addition to the liquor habit, "cases of serious exhausting disease—phthisis, rheumatism, locomotor ataxia, neuritis, "and other diseases are frequently met with, and it is by no means easy to appraise "precisely the position of such affection in the causation of the patient's condition."

Walsall.—"Still the difficuly in getting persons who are willing to enter a home "before a magistrate, but a greater difficulty in getting drunkards to give their "consent until their estate has gone. No provision or penalty to a patient who makes "himself intolerable in the Retreat for the purpose of getting liberated, nor for "making frivolous, unfounded, or highly exaggerated reports to the Home Office "necessitating attendance for inquiry of inspector. Great difficulty in regulating "control of tobacco; the Licensee allowed no control in this. Great delay and trouble "in getting warrant for recapture of patient who has escaped, and expenses incurred "therein."

Walsall—Daisy Bank.—"I think something should be done to enforce patients to "enter the Retreat after having signed the necessary papers, as it is, a great many do "not come even after signing."

Westgate.—"In accordance with your desire, I have the pleasure to make the "following comments on the work of the Tower House Retreat during the 12 months "ending 31st December 1893.

"The total number of patients received and discharged during the year in question, "is practically the same as that of the previous year, and the pressure on the available "space has, at times, been very great, owing to the fact that the patients now stay "for longer periods than was formerly the case; and as a longer detention is more "likely to be followed by permanent benefit to those concerned, I am not sorry that "this should be so, although the Parliamentary schedule takes no note of the average "period of the patient's residence.

"I still look forward to the time when extended legislation will render it possible "to bring under treatment confirmed inebriates, even against their will, and on the

"ground that their will is, by the very nature of their disease, infirm and misleading, "and their detention would be in the best interests of themselves, their families, and "the public."

6. In conclusion, I may mention, that at the beginning of the present year (1894), a new retreat was opened under the Inebriates Acts at Capel Lodge by Dr. Edward Norton for the treatment of eight male patients. The house stands at a high elevation overlooking the sea, on the main road between Folkestone and Dover.

I have the honour to be,
Sir,
Your most obedient Servant,
H. W. Hoffman,
Inspector of Retreats.

The Right Honourable H. H. Asquith, M.P.,
&c. &c. &c.,
Secretary of State, Home Office.

SCHEDULE referred to in the FOURTEENTH REPORT of the INSPECTOR OF RETREATS under the Inebriates Acts, 1879 and 1888, for the Year 1893.

Number of Retreats - - - - - - 8.

Name and Situation of Retreat.	Name of Licensee.	Date of License or Renewal of License.	Number of Patients licensed for.	Sex.	Number of Patients remaining 31st December 1892.	Number of Patients admitted during the Year 1893.	Number of Patients discharged during the Year 1893.	Deaths during the Year 1893.	Number of Patients remaining 31st December 1893.
St. Veronica's Retreat, Burlington Lane, Chiswick, Middlesex.	Mrs. Isabelle F. Smith and Hannah Maria Hansom.	8th April 1893 -	25	Female - -	7	15	7	Nil	15
The Grove Retreat, Egerton Road, Fallowfield, near Manchester.	Mrs. Mary Hughes and Miss Elizabeth Pritchard.	27th July 1893 -	25	Female - -	24	25	24	Nil	25
Kingswood Park, near Bristol - -	T. Walter Brimacombe, M. Isabella Brimacombe, and R. W. Brimacombe, L.R.C.P. Lond., M.R.C.S. Eng.	4th April 1893 -	10	Male - -	Nil	11	3	Nil	8
Dalrymple Home, Rickmansworth, Herts -	R. Welsh Branthwaite, L.R.C.P. Lond., M.R.C.S. Eng.	17th July 1893 -	20	Male - -	14	23	26	Nil	11
High Shot House, St. Margaret's, Twickenham, Middlesex.	Douglas Anderson, M.B., C.M., and R. Welsh Branthwaite, L.R.C.P., M.R.C.S.	8th April 1893 -	10	Male - -	4	6	5	Nil	5
Old Park Hall, Walsall, Staffordshire -	F. J. Gray, L.S.A., and F. J. S. Gray.	24th Nov. 1893 -	14	10 male and 4 female.	13	13	17	Nil	9
Daisy Bank, Walsall, Staffordshire - -	F. J. S. Gray, and F. J. Gray, L.S.A.	6th March 1893 -	10	Female - -	Nil	3	1	Nil	2
Tower House Retreat, Westgate-on-Sea, Kent.	A. F. Street, M.A., M.D., B.S. (Cantab), and Bridgman Smith.	17th October 1893	20	14 male and 6 female.	17	33	38	Nil	12
			134		79	129	121	Nil	87

APPENDIX.

THE INEBRIATES ACTS, 1879 AND 1888.

RULES FOR THE MANAGEMENT OF RETREATS LICENSED UNDER THE ABOVE ACTS.

I, the Right Honourable Henry Matthews, being one of Her Majesty's Principal Secretaries of State, by virtue of the power conferred on me by section 17 of the Act 42 & 43 Vict. c. 19, do hereby revoke the Rules for Retreats made on the 1st day of January 1880 by the Right Honourable Sir Richard Assheton Cross, G.C.B., then one of Her Majesty's Secretaries of State, and also the additional rules made on the 10th day of August 1883 by the Right Honourable Sir William Vernon Harcourt, then one of Her Majesty's Principal Secretaries of State, and in their place I do hereby make the following rules for the management of retreats licensed under the above Acts.

Plans.

1. The plan or plans submitted to the justices according to the Form No. 1 of the second schedule of the Habitual Drunkards Act, 1879, shall be hung up in some conspicuous place in the retreat.

On the plan or plans the rooms to be appropriated to the use of the "habitual drunkards," herein-after termed "patients," shall be distinguished from those used by the licensee and his family.

Books.

2. The licensee of the retreat shall provide and keep the following books, namely, "The Register of Admissions" and "The Register of Discharges and Deaths."

These books shall respectively be in the forms, and contain entries of the particulars given and indicated in the Schedules A. and B. hereto annexed.

He shall also provide a "Case Book," in which the medical attendant, or the licensee, if acting as medical attendant, shall enter the name, sex, and previous occupation of every patient admitted into the retreat, and whether he or she is married, single, or widowed.

Subsequent entries shall be made therein recording the progress of each case, and also all bodily ailments, injuries, or accidents happening to the patients; the medicines and alcoholic stimulants (if any) administered; and the special treatment adopted for the cure of the patient, with the result. Such entries shall be made monthly or oftener. Should any physical coercion or restraint be employed, a full detail of the circumstances shall at once be entered in this "Case Book."

The licensee shall also provide a book to be called the "Visitors Book," with which shall be bound up Queen's Printer's copies of the above Acts, which shall be for the use of the inspector, and the inspector shall enter therein such observations and report as he may think fit; and a copy of all such entries shall, within three days after the date thereof respectively, be transmitted by the licensee to a Secretary of State by post.

The licensee shall keep a list of all patients residing in his house, or who may be absent on license, together with the payments made by or for each of them.

Notices.

3. In addition to the notices required by the Acts, the licensee shall, within two clear days after the death or discharge of any patient in the retreat, send by post notice of such death or discharge to the clerk of the local authority and to a Secretary of State.

The licensee shall, within two clear days, send by registered letter to the inspector notice of every license permitting a patient to be temporarily absent from the retreat, and such notice shall give the name and address of the person with whom the patient is to reside during such absence.

He shall also, within the same time, send notice by registered letter to the inspector of every escape of a patient, and, if subsequently re-taken, of the return of such patient to the retreat.

Inspection.

4. All parts of the retreat shall at all times be open to the inspector, and shall be shown to him at his visitation, and every patient detained in the retreat shall be produced to him. The licensee shall give full and true information to the inspector in reply to such inquiries as he may deem necessary, and lay before him all books, registers, lists, and documents by the Acts or hereby required to be kept, and at all times furnish him with copies of any entries which he may require.

The licensee and the medical attendant respectively shall, whenever required by the inspector, furnish him with a special report upon the mental and bodily condition and conduct with reference to abstinence from intoxicating liquor, or otherwise, of any patient on the register of the retreat.

Habitual Drunkards being or becoming Insane.

5. If any patient admitted into or detained in the retreat shall be found to be, or shall while in the retreat become insane, the licensee shall immediately give notice thereof by registered letter to the inspector, to the person by whom the last payment for such patient was made, and to one at least of the persons who signed the statutory declaration under section 10 of the Habitual Drunkards Act, 1879, and also to the relieving officer of the union or parish in which the retreat is situated, to the intent that the patient so being or becoming insane may forthwith be placed under proper care and control as a lunatic.

Separation of Sexes.

6. The licensee shall, in cases where patients of both sexes are received in a retreat, make due provision for the separation of the sexes at night, and at all but defined hours in the daytime.

Visits of Friends.

7. Patients in a retreat may at all reasonable times be visited by their relatives and friends: Provided always, that if in any case the licensee shall think that the visit of any particular person or persons would at any particular time, or generally, be prejudicial to the patient proposed to be visited, or would be likely to hinder the cure of such patient, he may prohibit such visit.

In the case of a prohibited visit, the licensee shall give his reasons for refusal, in writing, to the visitor, and an entry of such reasons shall be made in the "Case Book," and a copy thereof sent to the inspector within 24 hours.

The inspector may, at any time, give an order in writing under his hand for the admission to any patient of any relative or friend of such patient of either sex (or of any medical practitioner whom any such relative or friend of such patient shall desire to be admitted to the patient), and such order of admission may be for a single admission or for an admission for a limited number of times, or for admission generally at all reasonable times.

The licensee may, if he shall think fit, direct that interviews between patients and visitors of the opposite sex shall take place in the presence of an official or attendant of the retreat.

Patients' Letters.

8. The licensee shall post or forward all letters written by the patients of his retreat according to the intentions of the writers, unless he shall have good reason to know that they are written for the purpose of obtaining intoxicating liquor or other prohibited articles, or of promoting the escape of a patient.

He shall also deliver unopened all letters and parcels addressed to his patients unless he has good grounds for believing that they contain prohibited articles, in which case he may require the patient to open such suspected letter or parcel in his presence.

Any suppressed letters or parcels must be forwarded to the inspector within two days, to be dealt with as the Secretary of State shall direct.

Provided always, that all letters written by a patient and addressed to a Secretary of State, to any Judge of the High Court of Justice, to a County Court Judge, to the local authority or clerk thereof, or to the inspector, shall be forwarded unopened and without delay.

Public Houses.

9. A patient detained in a retreat shall not without written permission from the licensee of the retreat enter any public house or other house where intoxicating liquors are sold.

Intoxicating Liquors.

10. Without special written authority from the medical attendant of a retreat a patient shall not take any intoxicating liquor, or sedative narcotic, or stimulant drug, or preparation.

Prosecutions.

11. It shall be the duty of the inspector to report to the Secretary of State any serious offence against the provisions of the Acts, or these Rules, which may be brought to the notice of the inspector, with a view to take such action in relation thereto as the Secretary of State may direct.

Attendants.

12. Every attendant and servant shall be duly informed of the offences specified in the Acts, and of the penalties attached to the commission thereof. They shall also be furnished with a copy of the "Regulations and Orders" authorised by the inspector, and it shall be the duty of the licensee to prosecute every attendant offending against the Acts or these rules, and in case of conviction to dismiss the offender from his service.

Regulations and Orders.

13. "Regulations and Orders" (not inconsistent with these rules) for the domestic arrangements of the retreat and the management and treatment of the inmates thereof, shall within one month from the granting of the license, be drawn up by the licensee, and by him be submitted to the inspector; and such "Regulations and Orders," when approved by the inspector, shall be adopted and strictly observed in the conduct of the establishment.

Whitehall,
10th August 1888.

HENRY MATTHEWS.

SCHEDULE A.

Register of Admissions.

Date of previous Admission (if any).	No. in Order of Admission.	Date of Admission.	Christian and Surname at Length.	Sex. M.	Sex. F.	Age.	Condition as to Marriage. Married.	Single.	Widowed.	Condition of Life.	Previous Place of Abode.	Date of Application and of Justices Attestation.	Condition of Health.	Date of Discharge or Death.	Discharged.	How discharged.	Died.	Observations
	1	1880. Jan. 3	William Johnson -	1	—	29	—	1	—	Stockbroker -	- - -	1879. December 30 -	Good	1880. June 21 - -	1	Efflux of time.		
	2																	
	3																	
	4	1881. Apr. 5	Jane Smith -	—	1	45	1	—	—	Wife of Tailor -	- - -	1881. April 1 - -	Feeble	1881. September 9 -	—	—	1	

SCHEDULE B.

Register of Discharges and Deaths.

Date of Discharge or Death.	Date of last Admission.	No. in Register of Admission.	Christian and Surname at Length.	Discharged. Sex. M.	Discharged. Sex. F.	How discharged.	Died. Sex. M.	Died. Sex. F.	Age at Death.	Assigned Cause of Death.	Observations.
1880. June 21 - -	1880. January 3 -	1	William Johnson -	1	—	Effluxion of time.					
1881. September 9 -	1881. April 5 - -	4	Jane Smith -	—	—	- - -	—	1	46	Phthisis.	

REPORTS

OF

H.M. INSPECTORS OF FACTORIES

AS TO

HOURS OF WORK, DANGEROUS MACHINERY, AND SANITARY CONDITION.

Presented to both Houses of Parliament by Command of Her Majesty

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B. $\frac{14,742}{14}$

(*a.*)—

Home Office, S.W.,
23rd October 1893.

SIR,

I BEG to forward reports from Her Majesty's inspectors of factories relative to laundries, of each of which Mr. Johnston, Her Majesty's Deputy Superintending Inspector, has made a précis and prepared a general summary.

From these reports I consider that it is desirable that laundries should be placed under the Factory Acts for the purpose of securing the following ameliorations in the condition of those employed therein.

1. Fencing of engines and dangerous machinery.

2. Keeping down the temperature of the ironing rooms by proper ventilation or fans where required, preventing overcrowding, and the separation of the stove from the workers.

That where gas irons are used they should be such as do not emit offensive fumes.

3. Conveying away the steam from the washhouses by ventilation or the use of fans. Securing the proper condition of the flooring and drainage, and the provision of boards or grids to keep the women's feet dry.

4. Regulation of the hours of work, allowing the usual hours under the Factory Act, with two hours overtime on 96 days in 12 months, to be reduced after a fixed period to 48 days.

Another day or other days to be substituted for the Saturday half-holiday, so that it may be given to washers, ironers, and sorters and packers on different days, and in the forenoon or afternoon as suits the special circumstances of each firm.

5. As the principal objections come from nunneries, such places, together with charitable institutions, to be visited only in case of complaint and under the special instructions of the chief inspector, the nunneries to be inspected only by lady inspectors.

I beg to submit that these matters have consideration in the next amending Factory Bill.

I have, &c.
(Signed) R. E. SPRAGUE ORAM.

Sir G. Lushington, K.C.B.,
&c. &c. &c.

B. $\frac{14,742}{14}$

LAUNDRY REPORTS, 1893.

(*b.*)—SUMMARY.

The various inquiries which have been made into the work conducted in laundries seem to show that the hours of work are very irregular, work being slack on Monday, whilst towards the end of the week they are often excessive, the meal times being scanty and irregular. This arises from the difficulty of getting soiled clothes early in the week, and the necessity for their being sent home on Saturday (Miss Paterson). Also that the Saturday half-holiday and other holidays are often not given, and that Sunday work is not uncommon.

Examples will be found as follows, on referring to the reports of Her Majesty's inspectors:—

Excessive hours of work.

Work goes on till 10, 11, and 12 p.m. without extra meal time (Mr. Redgrave).

Overtime is constantly carried on in busy season until midnight (Miss Abraham).

Hours are irregular and at times excessive, three days and three nights at a stretch (Mr. Bowling).

Hours of work 85, 74, 66, &c. per week; Friday and Saturday to 10 and 12 p.m. Four times a year.

Ironers work from Friday morning till Saturday at midnight continuously. Working all night not uncommon; general feeling amongst workers that the late hours are a hardship; working 42 hours at a stretch; other instances of working all Friday night. In a shipping case working all Friday night until noon on Saturday (Miss Paterson).

In a shipping case work continued all Friday night and to noon on Saturday (Mr. Cameron).

Overtime on Friday and Saturday to 9, 10, or 12 p.m. Said to work in some laundries all night, and even on Sunday (Mr. Tom Davis).

Work goes on all day and all night (Mr. Maitland).

Late work frequent and abuse of overtime (Mr. Cameron and Mr. Dawson).

Work continued very late, and even all night (Mr. Vaughan).

Complaint sent to Mr. Richmond of the following hours in one week:—

Monday, 6.30 a.m. to 10 p.m.
Tuesday, 6.30 a.m. to 10 p.m.
Wednesday, 6.30 a.m. to 12 p.m.
Thursday, 6.30 a.m. to 2 a.m.
Friday, 6.30 a.m. to 12 p.m.
Saturday, 6.30 a.m. to 9 p.m.

Sunday work (Messrs. Knyvett, Arbuckle, and Redgrave), excessive hours; Wednesday till 10 p.m., Thursday and Friday later, and on Saturday the hours practically unlimited (Mr. Whitelaw).

No regular meal times (Mr. Whitelaw).

Habits of drinking are said to be induced by exhaustion consequent upon overwork (Miss Paterson).

Sanitation. In respect of sanitation, there is frequently excessive heat arising from the stoves for heating irons being in the ironing room, and from overcrowding and want of ventilation (Miss Abraham, Messrs. Hayward and Goddard).

Excessive heat and moisture. Excessive heat also in washhouses, with the addition of an unhealthy amount of moisture, the steam not being removed by proper ventilation.

Wet feet. Through want of boards or grids to stand on and uneven floors and imperfect drainage the washers' feet are kept constantly wet.

Clothes saturated with water (Miss Abraham, who recommends some protection, as is afforded to wet spinners).

Where gas irons are used the air is in some instances vitiated, owing to there not being an efficient exhaust to carry off the burnt air (Miss Paterson).

The sanitary condition is often bad, and the damp injurious (Mr. Davis).

Consumption caused by heat and moisture. Consumption is caused by moisture and heat.

W.C. accommodation deficient. Watercloset accommodation often defective, *e.g.*, "one for 50 men and women"; "two for 62 women" (Mr. Whitelaw).

Mr. Arbuckle observes the paleness of the workers in laundries.

Mr. Mackie says that in some laundries the sanitation and ventilation are bad.

Washing and ironing, distinct processes. It is a peculiarity of this work that it must be carried on through the whole six days of the week.

The washers work from Monday to Friday, and the ironers from Tuesday to Saturday, both inclusive.

Saturday half-holiday to be given on different days. This forms a difficulty in applying the regulations of the Factory Act, which can be met by allowing the former to have their weekly half-holiday on Saturday, the latter on Monday forenoon (Miss Abraham, Messrs. Woodgate, Richmond, Johnston). Some laundry occupiers think it could be arranged to cease work at 2 p.m. on Saturday (Miss Abraham).

The pressure at the end of the week caused by mismanagement. The sorters and packers form a third class, who are specially wanted on Monday and Saturday, and they would require to have the half-holiday on a different day.

Several persons express the opinion that the pressure, which occurs frequently on Thursday, Friday, and Saturday, arises from mismanagement, in customers not sending their linen in time, or in laundry occupiers not being sufficiently energetic in sending for them (Miss Abraham, Miss Paterson, Mr. Vaughan,

Mr. Shaw, and Mr. Dawson). An example is given of a small laundry occupier who *sends* for customers' linen on Monday and again on Tuesday, *receives* what is sent on Wednesday, and after Wednesday receives no more for return the same week. She experiences no difficulty in carrying on business in regular hours.

Another occupier of a steam laundry keeps over until Monday a portion sufficient to start his hands in good time next week, with the like result (Miss Paterson). It is thought that almost all laundries might get in work on Saturday for this purpose (Miss Abraham).

The proprietors in Glasgow are in favour of more regular hours.

Many managers, too, think that the work can be carried on in the Factory Act hours, with a concession for overtime (Miss Abraham, Mr. Bignold), and are anxious that the Act should be applied, provided that it is enforced universally, in small places as well as large (Messrs. Davis, Vaughan, Woodgate, Knyvett, Richmond, Maitland, Dawson, and Goddard).

Otherwise the small laundries would compete injuriously.

This extension of the Act is approved of as being beneficial to the workers generally, and as tending to check the unfair competition of small places, in which the worst cases of overtime occur.

Some proprietors think that the *weekly* hours could be limited, but not the *daily* hours (Miss Paterson).

Another would like to have six months' notice of application of Factory Act, as he thinks an increase of plant would be necessary (Mr. Woodgate).

The fact that many laundries, including two belonging to shipping companies (Mr. Richmond, Captain Smith, &c.), have voluntarily placed themselves under the Act, or adopted the hours of the Act, goes to prove that it is practicable for all.

Suggestion is made that all laundries should be registered and licensed (Mr. Woodgate).

Fencing of machinery.

Especially are managers in favour of the provisions for safety being applied, even amongst those who cannot see their way to the restrictions of hours.

There is no doubt that the fencing of engines and machinery is very generally neglected, as will be seen in the majority of the reports.

Shipping orders.

There is a difficulty arising out of urgency of orders from shipping and hotels connected with shipping, inasmuch as passengers on arrival send clothes to be washed at short notice, in order to resume their journey, and in these cases night work is said to be unavoidable (Mr. Bowling). This shipping business seems to be done in large steam laundries exclusively, in which the washing is done by men, and it is said that ironing could be also.

It is suggested that as regards household linen the shipping companies and hotels connected therewith might be obliged to keep a double supply (Miss Paterson).

Convent laundries.

Some laundry proprietors in Ireland approve of the application of the Factory Act, but would feel it an injustice if convent laundries were exempted (Miss Abraham, Mr. Woodgate).

But it is said that vehement opposition would be raised to the inspection of the latter.

Two superioresses, however, expressed but little objection (Miss Abraham).

The reports from them and from those of charitable institutions seem to show that they are well ordered, and that the wellbeing of the inmates is primarily considered (Messrs. Arnold, Hoare, and Woodgate).

Shortening of hours advantageous.

A notable instance is given by Miss Abraham of advantages gained by adopting regular and moderate hours (more and better work being turned out*), combined with a better system of management.

Two instructive letters from laundry proprietors accompany Mr. Woodgate's report, and although the suggestions made in them are noticed in this summary, they deserve special attention.

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* This was found to be the case after careful experiments made in the Birmingham button factories about the year 1867, when they adopted the hours 8 a.m. to 6 p.m., with one hour for dinner.

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(c.)—Miss Abraham.

Steam laundries

The proprietors of steam laundries do not admit working excessive hours, stating them to be 8 a.m. to 8 p.m., with overtime occasionally to 9.30 p.m.

Working till 12 p.m.

She knows, however, that overtime is constantly worked in busy season till midnight.

Advantage shown to result by adopting moderate hours.

Mr. Elliot, of Rathfarnham Laundry, reduced his hours from—

6 a.m. to 12 p.m. most days of the week } to { 8 a.m. to 8 p.m. / 8 to 2 on Saturday;

and finds more and better work turned out.

Success partly due to better management, in beginning at 8 a.m. on Monday.

He thinks all laundries except the smallest might get work in on Saturday to start with on Monday morning.

Saturday half-holiday.

In three important laundries the managers think work might cease at 2 p.m. on Saturday; others of contrary opinion, and suggest substituting another day, *e.g.*, Monday morning.

To be given on Monday morning or on different days.

If this is objected to, then to give holiday to washers and ironers on different days.

Two laundry proprietors mentioned as being in favour of placing them under the Factory Act. No hostile opinions met with except in Ireland (as mentioned in Mr. Woodgate's report), where they are opposed to this step, unless convent laundries are included, especially on ground of child labour.

Convent laundries.

Visited two convent institutions where most children are employed. Found hours moderate; no dangerous machinery; sanitation good. The superioress of one has no objection to go under the Factory Act.

In the second, superioress indifferent to inspection, but dislikes "Government rules"; hours worked within those of Factory Act.

Hotels.

The Grand, Metropole, and First Avenue Hotels, London, are going to start a laundry of their own.

No objection to legislation.

Managers do not object to State regulation of hours, having ample stock of linen.

For visitors' linen they would make arrangements necessary for conforming to law.

Washing sent home 2 a.m. on Sunday.

Hotel Victoria. The manager says washing is brought home as late as 2 a.m. on Sunday.

Night work necessary.

Visitors give washing out in evening to be returned the following morning. Thinks difficulty would result from prohibiting night work.

Sanitation.

Temperature in ironing rooms often extremely high, and ventilation as a rule poor; the stoves generally in ironing rooms.

In small laundries clothes are dried in ironing rooms, and atmosphere full of moisture. Suggests protection from wet, such as is afforded to wet spinners, as she notices their clothes to be saturated with water.

To Her Majesty's Chief Inspector of Factories.

Sir,

I beg to submit the following report upon laundries :—

I have visited steam and hand laundries in London and Liverpool, and steam, hand, and convent laundries in Dublin. I have also interviewed the managers of the following London hotels:—The Hotel Victoria, Grand Hotel, Hotel Metropole, First Avenue Hotel.

All the proprietors of public laundries I have visited are agreed that an extension of the Act would affect the trade mainly in the following matters :—(*a.*) Fencing of machinery in steam laundries; (*b.*) Regulation of overtime; (*c.*) Allowance of a weekly half-holiday.

(*a.*) Fencing of machinery. No objection is raised to the obligations which the Act would impose in respect of machinery, provided sufficient time be allowed in which to make the required alterations.

(*b.*) Regulation of overtime. None of the proprietors I interviewed admit working excessive overtime. The standard day is, as a rule, stated to be 8 a.m. to 8 p.m. with certain exceptions, such as Monday, when the washers do not start work till 2 p.m., and Tuesday, when sometimes the ironers do not start until the same hour. Wednesday and Thursday and Friday and Saturday are generally the busiest nights for washers and ironers respectively; and upon these nights 9.30 p.m. is the latest hour to which the employers admit the continuance of overtime. In one of the laundries visited, however, I know overtime to be constantly worked in the busy season until midnight. The later hours, it is also stated, are only worked during the months of June and July. The manager of the Mountpleasant Steam Laundry in Liverpool states that although he works for hotels, the women are seldom kept after 8 p.m. Mr. Elliot, the manager of the Rathfarnham Laundry, Whitechurch, Dublin, states that within two years he has reduced the hours at this laundry from 6 a.m. to 12 midnight on most days of the week, to from 8 a.m. to 8 p.m. Monday to Friday, and 8 a.m. to 2 p.m. on Saturday. On Tuesdays and Fridays in the busy season work is occasionally continued until 9 p.m. Mr. Elliot states that although the custom of the laundry has considerably increased, the reduction in hours has been made a financial success by the improvement both in the quantity and the quality of the work turned out under the new system. Mr. Elliot believes that part of his success is due to the fact that work begins on Monday at 8 a.m., and that the four hours so gained at the beginning of the week prevent overtime pressure at the end. He sees no reason why all laundries except the smallest should not get in enough work on Saturday to provide sufficient material for an 8 o'clock start on Monday. "Most laundries have two deliveries a week, which keeps a " constant supply of clothes in hand; moreover, there are always some " customers who are glad to send back clothes by the van which delivers on " Saturday."

(*c.*) Allowance of weekly half-holiday. The manager of the Rathfarnham Laundry, where work always ceases at 2 p.m. on Saturday; the manager of the Edmonstown Laundry, where these hours are also the rule; and the proprietor of the Queen's Laundry, Chelsea, where even in busy seasons it is the exception to work on Saturday, see no objection to the observance of Saturday as a weekly half-holiday; but some managers are of opinion that another day should be substituted. It is suggested that Monday morning should be utilised for this purpose, or, that if this were not considered desirable, that washers and ironers should not be obliged to take their half-holiday on the same day.

Mr. Elliot, the propietor of the Queen's Laundry, Chelsea, and the manager of the Mountpleasant Laundry, Liverpool, are in favour of the inclusion of laundries under the Act. I received no hostile opinions to inclusion, with the exception of those expressed by some proprietors in Ireland, some of which I understand from Mr. Woodgate have been mentioned in his report.

All the proprietors I visited in Ireland are opposed to inclusion, if the convent laundries are exempted. They complain of the advantages which such laundries would then possess; for instance, exemption from the cost of fencing machinery, and exemptions from the regulations affecting child labour. The latter point was emphasised by the managers of the Rathfarnham and Edmonstown Laundries.

I visited the two convent institutions in Dublin in which the largest amount of child labour is employed. Both are under the charge of the Sisters of Charity. The laundry at Lakelands is worked by orphanage children, and by those from a certified industrial school. The children are never employed under ten, and rarely under eleven, years of age. From that age until about fourteen they are only employed for three or four hours during the day. The elder children are employed in sets from 8.30 a.m. to 1.30 p.m., and from 3.30 p.m. to 6.30 p.m., when all employment ceases. There is no dangerous machinery, and the sanitation is good. The superioress of these institutions

has no objection to inclusion under the Act if this step were considered advisable.

The second convent laundry employing children is situated at Stanhope, St. Phipsborough. The institution is called an "industrial training school," but is not a "recognised certified school" in the meaning of the Act, or subject in any way to inspection. The superioress here objects to inclusion, not on the ground of inspection, to which she is indifferent, but because she dislikes "Government rules." The hours worked are within those allowed to workshops under the Act, but even although no alteration in the management were required, she would object to the "*name*" *of inclusion.*

The Sisters of Charity in charge of the penitentiary at Donnybrook, Dublin, where laundry work is extensively carried on, also *object to inclusion under the Act.* Like the superioress in charge of the Phipsborough Institution, the superioress of this convent would dislike the "name" of being under the Factory Act, and believes that such an alteration would *weaken their power over the women under their charge.*

Hotels. The managers of the Grand, Metropole, and First Avenue Hotels state that it is the intention of the company to whom these hotels belong to start a laundry for their joint purposes in the course of a year. The managers state that State regulation of hours would not prejudicially affect their hotel work. The company's stock of linen is sufficiently large to allow a considerable quantity to remain at the laundry. With regard to visitors' washing, which is given at uncertain times, if their hours were not regulated by the Act, they would probably arrrange for two shifts of workers at about 10 hours each. If their hours are regulated the company will make whatever arrangements are necessary.

The manager of the Hotel Victoria states that at present their work is divided between three laundries. Visitors' *washing is frequently brought home as late as* 2 *a.m.* on Sunday; and as visitors sometimes give washing in the evening to be brought back the following morning, the manager thinks a difficulty will be created if night work be prohibited. He is not, however, of opinion that hotels would enter into competition with laundries should the latter be included under the Act.

The temperature of many of the ironing rooms in the laundries I visited was extremely high, and the ventilation, as a rule, is poor. Where gas irons are not in use, the stove upon which the irons are heated is generally kept in the ironing room. From this cause a high temperature is maintained, and in most of the smaller hand laundries the clothes are dried in the ironing room, around the stove or overhead. Where this is so, the atmosphere is full of moisture.

Protection from wet in the washhouses, such as is afforded to wet spinners, would, I think, be appreciated by the women employed in this part of the laundry. I have noticed their clothes to be heavily saturated with water, which had escaped owing to the imperfect arrangements in the washhouses.

I am, &c.

(Signed) May E. Abraham.

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(*d.*)—Miss Mary M. Paterson.

Glasgow, &c. Excessive heat.

Laundries generally clean, but washhouses often in dirty and insanitary condition, the heat being excessive and ventilation defective.

Gas irons injurious.

The use of gas irons* observed to be injurious.

Overcrowding rare.

The *nominal* weekly hours as shown in tabular form, not excessive, being mostly under 60, except in a few instances where they reach 85, 74, 66, &c. hours.

Hours irregular and excessive.

But, as shown by numerous instances of excessive hours given below, these hours are not adhered to, and the meal times are both deficient and irregular.

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* Gas irons are in use in Leeds from which no fumes escape.

The hours, &c. are most irregular in the smallest places.

Proprietors in Glasgow in general in favour of more regular hours, but not unanimous in advocating the application of the Factory Act. All are willing that the *weekly* hours should be limited, but not the *daily* hours. Proprietors favour a weekly limit.

Difficulties in securing greater regularity are:—

(1.) Apparent impossibility of getting work early in the week.
(2.) Necessity of sending clean clothes home on Saturday.

Difficulties in securing regular work.

There is a class of laundries who devote themselves to late washing sent in on Thursday or Friday, as many laundries refuse to take it in.

This lateness in sending to wash, like late shopping, is principally the result of mismanagement, and there is no remedy for it but in legislation. Lateness in sending clothes to the wash a matter of habit.

Instance given of a laundry in which it is usual for washers not to have any work on Monday, but on Friday and Saturday they always have to work till 10 p.m., and frequently 12 p.m. Long hours at the end of the week.

Instances of ironers working four times a year from Friday morning until Saturday at midnight continuously. Long hours worked by ironers.

It is thought by some proprietors that more regular hours would prevent the drinking induced by exhaustion. Drinking induced by exhaustion.

A general feeling exists amongst the workers that the late hours are a hardship: question raised by Miss Paterson whether enforcement of more regular hours would reduce wages. To some the hard and irregular work is compensated for, by their being able to get a day off sometimes early in the week, but the more sensible of them, wish much for the Factory Act to be applied to their case. Glasgow. Feeling that late hours are a hardship.

Most women who have been on laundry work three or four years, have at least on one occasion worked all night. Instance given of a woman working 42 hours at a stretch (less than three hours for meals) in washing and ironing. Working all night not uncommon.

Many instances given of working early and late on Friday and Saturday, sometimes as long as 7 a.m. to 12 p.m. Long hours on Friday and Saturday.

In Aberdeen three laundries were found in good condition. Factory Act might be applied without opposition. Some overtime is occasionally worked. Workers only complained of working after 2 p.m. on Saturday. Aberdeen. Complaint of working on Saturday afternoon.

Laundries not so clean or airy as in Aberdeen, and more opposition expressed to Factory Act amongst the workers than anywhere else. Dundee and Perth.

The workers look pale and unhealthy. Want of cleanliness.

Opinions amongst proprietors as to Factory Act divided. One laundry has 300 small customers, who call for their "wash" up to 7 p.m. on Saturday.

Instances given of bad ventilation, heat up to 84 degrees, and a gas engine unfenced. Excessive heat.

Some steam laundries in good condition.

Many laundries situated in area flats of private houses, mostly deficient in ventilation. Edinburgh.

Here again want of employment for ironers in beginning of week the chief difficulty in regulating work. Want of employment early in the week.

Very late work at end of week exceptional here.

Few holidays given, and those have to be made up for. Few holidays given.

General feeling is in favour of some limitation of hours, but opposed to Factory Act.

Some overcrowding in hand laundries, ventilation neglected in them and in large places too.

Smell of gas irons noticed as being offensive. Most hotels give their washing out. Gas irons offensive.

Many proprietors of small laundries had tried to regulate their work better but failed, and thought it would be inconvenient to enforce restrictions.

Suggestion was made that ships and hotels doing shipping trade would have to keep double supplies of linen unless work could be done at night. Night work in shipping trade.

Newcastle, Sunderland, and Shields.

Many laundries very dirty and badly ventilated; reluctance to give admission; was only admitted to one of the four steam laundries visited.

Night work in shipping trade.

Employers almost all admitted working very late hours at times, *e.g.*, in a shipping case work was carried on all Friday night until noon on Saturday. Opposed to restriction of daily work, but in favour of a weekly limit.

The same difficulty here in getting clothes early in the week.

One employer allows his women to work all night on Friday instead of coming on Saturday.

Night work.

Instance given of a woman working all night on Friday and up to dinner-time on Saturday.

She said she thought something ought to be done, as the work was killing. Would prefer having less wages.

Some proprietors blame the workers for the irregular hours, as they will not come early in the week.

Work equalised in one laundry.

One manager said she can always keep enough work over at the end of the week to start with on Monday, and has little trouble consequently.

No.	No. of Workers.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal hours.	Hours of Work per Week.	Holidays.
1	3 in all	7–7	7–7	7–7	7–7	7–7	7–7	1–2	66	No information.
2	40 in all	8–6	8–6	8–6	8–6	8–6	8–4.30	1–1.30	55½	Six in year at least.
3	55 in all—Washers	7–6	7–6	7–6	7–6	7–6	—	1–1.45	51	Six in year at least.
	Ironers	—	7–6	7–6	7–6	7–6	7–1		47	
4	110 in all	7–6	7–6	7–6	7–6	7–6	7–1.30	9–9.30; 1–1.30	56	Six in year at least.
5	6 ironers; 3 washers	7.30–6	7.30–6	7.30–6	7.30–6	7.30–7	7.30–1	12–1	54	Week in summer, &c.
6	11 in all	8–6	8–6	8–6	8–6	8–8	8–1	1–2	52	Week in summer.
7	14 ironers; 5 washers	7–7	7–7	7–7	7–7	7–8.30	7–2	9–10; 2–3	57½	Week in summer.
8	1 ironer; 1 washer	7–5	7–5	7–5	7–5	7–5	7–1	1–2	51	Week in summer.
9	14 in all	7–6	7–6	7–6	7–6	7–8	7–3	12–1	59	Week in summer, &c.
10	43 in all	8–6	8–6	8–6	8–8	8–9	8–3	1–2	57	Three days summer. Two at New Year.
11	7 in all—Ironers	—	2–7	8–7	8–7	8–9	8–3	1–2	44	Six at least.
	Washers	8–7	8–7	8–7	8–7	8–7	—	1–2	50	
12	5 ironers	—	8–6.30	8–6.30	8–6.30	8–9	8–6	1–2	49½	No regular holidays.
	2 washers	8–6.30	8–6.30	8–6.30	8–6.30	8–6.30	—	1–2	47½	
13	35 in all	—	—	—	—	—	—	1–2	—	Six at least.

Condition of Laundries.

While there are few laundries which are not kept clean, many of the wash-houses are in a very dirty and insanitary condition, especially those under shop laundries. The walls are often unplastered, the floors uneven, and no arrangement made for the water to run off. The atmosphere is, as a rule, very close, and this applies also to a number of the shop laundries, where a draught between the door in front and the window at the back forms the only ventilation. The heat is excessive, and very trying where the stove is in the same room as the ironers, but even this is preferable to the condition of the laundries where gas irons are used, and the workers in the former have a healthier appearance than those in the latter. Of course there are many

laundries where everything that may conduce to the comfort of the workers is done, and where the stove is in a separate room, a considerable improvement is effected. I wish to point out that, while in my report I have given the regular meal hour, 10 or 15 minutes to make and take tea, is invariably allowed, when working late. On the other hand an hour for dinner is seldom compulsory, and half-an-hour is often all that is taken by slow workers. I did not see many cases of overcrowding, the nature of the work making space a necessity, and where children are employed, I think it is only as message girls or possibly markers. Few accidents are reported, where machinery is used, and fencing seems carefully attended to generally.

The opinions expressed by proprietors of small laundries were very varied, but most of them agreed that it would be a good thing to have more regular hours if possible. The apparent impossibility of getting work in early in the week, along with the necessity for giving it out on Saturday, are of course the chief reasons for the irregularity; and there are difficulties in making other arrangements. While they are by no means unanimous in advocating the introduction of the Factory Act or admitting the practicability of it, almost all the proprietors are willing that there should be some limit to the weekly, although not to the daily hours of work. As a rule, the most irregular hours are worked in the smallest laundries, but the complaint is the same in all grades. Difficulty in getting in the work early in the week. In many cases, the "wash" consists only of those things which require skilled ironing, and these are always wanted for Sunday, while they are not discarded until Wednesday, or perhaps Thursday. Then where things are sent in for ironing only, they are washed at home, and it is, obviously, impossible for everyone in a tenement to have the use of the washing house early in the week. The fact of wages being paid on Saturday has also probably something to do with it, among the working class, as ready money payments are the rule in small laundries. Many of the proprietors try to improve matters by taking no work in after Friday morning, to be given out the same week, and this has created a class of laundries that depend almost entirely on the last three days of the week, often not working at all on Monday or Tuesday and only half a day on Wednesday. Want of management, however, is the principal cause of the long hours in laundries, just as it is the principal cause of the late shopping on Saturday, and it is the general opinion that no improvements in the hours is possible, except made compulsory by law.

Proprietor of Laundry No. 4 (in report) stated that it was very unusual for any of his workers to come in on Monday, but on Friday and Saturday it was always 10, and frequently 12, before he could close; and that four times a year his ironers worked all Friday night, that is, from eight on Friday morning until midnight on Saturday.

Proprietor of No. 18 said it was his opinion that more regular hours would do much to prevent the drinking so common amongst the women, as they are often so exhausted that stimulant becomes a necessity.

Proprietor No. 20 advocated the Factory Act, as he thinks it would save him money, although it might lower wages.

Proprietor No. 22 stated that although she sent out some parcels every week for which four or five shillings were paid, yet her average price was not sixpence. She did not think the Factory Act could be applied to laundries of this kind.

Proprietor No. 5 thinks it quite time laundries were under the Factory Act, as she has done her best to get work in early in the week, but without success. Many others concurred in this last statement.

Among the workers themselves the general feeling is that the late hours are a hardship in every way, but at the same time few of them have considered the probable effect of more regular hours on wages, and where I have suggested that these might fall the opinions expressed have not always been favourable to the Factory Act. The possibility of taking a day off when desired and making it up later on the week has its attractions for many, especially among the married women, who are, in many laundries, the majority of the workers, but, on the whole, the best among them would, I believe, welcome the Factory Act. Where I have been able to get reliable

information it has always shown that the hours on certain days are too long, that the heat and the irregularity of the meal hours are bad for the health, and that the want of a regular weekly half-holiday is felt to be a hardship.

Ironer in Laundry No. 6, said she did not consider laundry work any harder than kitchen work (having tried both) if the hours were shorter.

Workers in Laundry No. 21, where seven out of the nine women employed are married, were unanimously in favour of the Factory Act, saying they could save more money at home than they made by overtime working.

Ironer in No. 23, said the heat was sickening, and on Saturday, when they often worked from 6 until 4, with only a breakfast hour off, was felt to be specially trying.

Washer in same laundry stated that her hours were from 8 until 7 every day except Saturday, when they began at 6 o'clock, worked at least until 2, and no meal hour was given at all, only time to make tea on the boiler fire. This woman had worked in another laundry previously, in which, on one occasion, she went into the washhouse at 6 a.m. on Thursday, washed until 11 p.m., when she became an ironer until 6 the following morning, when she again went into the washhouse until midnight, having been 42 hours at work, during which she had three hours off for meals. This I believe to be a very exceptional case, but I find that most of the women who have been at this employment for three or four years have had at least one experience of working all night.

Glasgow.

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
1	1 ironer; 1 message girl.	—	2–8	10–8	8–8	8–10	8–10	1–2 cup of tea when working after 8 p.m.	52	No information -	The proprietor here gave me these hours as the shortest worked in her laundry, and only applicable to the quietest season. Often a half-day is worked on Monday and 10 hours on Tuesday. Sometimes employs another ironer. Does washing herself. Visited at 10.10 p.m. on a Friday and found work going on.
2	2 ironers; 1 washer; 1 message girl.	—	8–7	8–7	8–7	8–7	8–9	1–2	52	No information -	Proprietor gave these as the usual hours; never later at night, but often begin at 7 or 7.30 a.m. She takes nothing into the wash-house, to be given out same week, after Friday morning, and finds little difficulty in managing to keep these hours.
3	1 ironer; 1 washer (part of week).	7–7	7–7	7–7	7–7	7–8.30	7–8.30	No fixed time, take about three-quarters of hour.	71½	Any that come on Monday or Tuesday.	This laundry was in good condition, clean and well-ventilated, the temperature 72°. I visited it at 11 p.m. on a Friday and found work going on then; also on Saturday at 6 p.m., when proprietor told me they would work at least until 10.
4	3 ironers - -	—	8–7	8–7	8–7	8–10	8–10	1–2	56	No information -	Proprietor gave me these hours as the shortest worked, they are often later every night, frequently until 12 on Friday and Saturday, and about four times a year they work all through Friday night. Called 10.30 p.m. on Friday and found it closed.

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
5	3 ironers; 1 washer; 1 message girl.	2–8	8–9	8–9	8–9	7–12	7–12	1–2	74	A week at least at fair.	Proprietor says these are her usual hours, and sometimes they begin earlier on Friday and Saturday. I visited it at 10.30 on Friday and found the work going on; proprietor said they would not have finished at midnight. Temperature 77°.
6	4 ironers; 2 washers	8–4	7–6	7–6	7–6	7–12	7–12	Mondays 1–2; other days 9–10 and 1–2.	64	Laundry never closed	The hours of work in this laundry are often very long. I visited it on Friday at 11.50 p.m., found the ironers still working. They had begun at 6 that morning, expected to finish by 12.30, and begin again 6 a.m. Saturday. The temperature in the middle of the day here was 82°.
7	3 ironers; 1 washer; 1 checker.	—	8–7	8–7	8–8	8–10	8–10	1–2	57	No information.	
8	4 ironers; 1 checker; 1 message girl; 1 washer.	10–5	10–8	8–7	7–8	7–8	7–11	1–2	65	No information	This laundry was in good condition; temperature 74°. Visited on Saturday and found work going on until 10 p.m. at least.
9	2 ironers; 1 washer	8–7	8–7	8–7	8–7	8–7	8–4	1–2	57	No information.	
10	2 ironers; 1 washer	6–9	6–9	6–9	6–9	6–9	6–10	1–2	85	No information	This laundry was exceedingly close and wanting in ventilation; temperature 75°.
11	2 ironers; 1 message girl; 1 washer.	8–7	8–7	8–7	8–11	8–11	8–11	1–2	66	No information.	
12	3 ironers; 2 washers; 1 message girl.	—	8–7	8–7	8–10	8–10	6–6	1–2	57	No information	Proprietor said it was difficult to say what was the usual number of working hours, as her trade varied very much. They often begin on Saturday at 4 or 5 a.m., and occasionally on Friday. The ironers seldom work on Monday.

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
13	6 ironers; 1 washer; 2 message girls.	—	8–7	8–7	8–9	8–11	8–10	1–2 5–5.30 when late.	57½	No information -	This laundry depends almost entirely on the work done at the end of the week; there is often no work on Tuesday, half-day Wednesday, and longer hours the remaining days.
14	3 ironers; 1 washer; 1 message girl.	7–7	7–7	7–7	7–7	7–7	7–4	9–9.45 1–1.45 half hour Saturday.	61	Eight at least in year	Proprietor informed me that they occasionally work on Friday until 9 p.m., but not more than once a month, and ironers sometimes do not work at all on Monday.
15	- - -	—	—	—	—	—	—	—	—	- - -	In this laundry, proprietor would give no information as to hours of work or number of workers, but admitted that it was often 12 before they stopped.
16	2 ironers - -	—	2–7	9–7	9–7	9–7	9–6	1–2 on Wednesday, Thursday, and Friday.	41	Four days at fair -	In winter ironers only come in Thursday, Friday, and Saturday. Temperature here only 68°., but air very much vitiated by the gas irons used.
17	3 ironers - -	2–7	8–7	8–7	8–7	8–7	8–4	1–2 except Saturday.	53	Five days in year -	Called here on Saturday at 5.45 p.m., and found the work going on. The hours given do not apply at all to the busy season.
18	7 ironers - - 6 washers - - 1 checker.	8–7 7–7	8–7 7–7	8–7 7–7	8–7 7–7	8–7 7–7	8–4 7–4	1–2 9–10 & 2–3	57 58	Four days in year -	Tries to keep his at 57 per week but exceeds it occasionally. Although the stove was not in the ironing room, the temperature was 76°. Fairly well ventilated.
19	8 ironers; 4 washers; 4 message girls.	8–7	8–7	8–7	8–10	8–10	8–11	1–2, Saturday 1–1.30, half-hour tea when working late	69	Week at fair -	This laundry was in a very insanitary condition. The wash-house very dirty and ill-ventilated. The stove was not in the ironing room, and temperate 73°.

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
20	10 ironers; 4 washers; 3 message girls.	10–7	8–7	8–7	8–7	8–7	6–1	1–1.30, Saturday 9–9.30.	57	Six days in year at least.	While giving me these as regular working hours, proprietor told me that the week previous to my visit the hours had been, Monday and Tuesday, 8–7; Wednesday, 8–8; Thursday, 8–9; Friday, 8–11; Saturday, 6–5; and this not very unusual. Temperature, 78°.
21	6 ironers - - 3 washers - - 1 checker - - 2 message girls.	10–7 7–7 8–9	8–7 7–7 8–9	8–10 7–7 8–9	8–10 7–7 8–9	8–10 7–7 8–9	8–5 7–7 8–9	1–2 quarter hour for tea when working late.	65	Three days at fair and New Year.	The women here often work during their meal hours, as a certain amount of work has to be done every day, and they are not allowed to leave the workshop until that is done. One week in July this year, the hours were 8 a.m. to 10 p.m. every day. Washers have half hour off for breakfast, and often work until 9 p.m.
22	18 ironers; 4 washers	2–7	8.30–7	8.30–7	8.30–9	8.30–10	8.30–4	1–2	55½	10 days - -	This laundry seemed well-conducted, but the proprietor admitted that the hours often exceeded those given here.
23	14 ironers; 3 washers; 2 message girls.	8–7	8–7	8–7	8–7	8–7	6–4	1–2, Saturday 9–10 instead.	59	Week at fair -	A good deal of overtime is worked here by both ironers and washers. On Thursday and Friday they often work until 10 p.m.
24	180 in all -	6–6	6–6	6–6	6–6	6–6	6–1	9–10 2–3	56	Six in year at least -	Proprietor said these were the working hours, if possible, but they are often exceeded. Does a large shipping trade, and finds that very difficult to regulate. The machinery was well-fenced,

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
24—*cont.*											the sheds very well ventilated, and the atmosphere purer than in any other laundry I have visited in which gas irons are used. There was even here, however, a slight smell of unconsumed gas. The temperature was from 75° to 79° in the various parts of the laundry.
25	50 in all - -	6.30–6	6.30–6	6.30–6	6.30–6	6.30–6	6–2	9–10 2–3	54½	No regular holidays -	Proprietor said Friday was the only night on which they were apt to work late. The machinery was well fenced where the women were working. The gas irons smelt very disagreeably, the place not being well ventilated. The temperature varied from 78° to 82°.
26	200 in all - -	6–6	6–6	6–6	7–7	7–7	6–2	9–10 2–3	56	Six days at least -	Proprietor said that although the hours sometimes varied, they were never more than 56 per week for any worker, and no one was employed later than 7 p.m. The machinery was well-fenced in some places, and the ventilating arrangements seemed good, although the temperature was not less than 80° in any part of the ironing room, and was as high as 87°, and the smell of gas from the irons pervaded the whole laundry.

Aberdeen, Dundee, Perth.

In Aberdeen laundry work is entirely in the hands of three steam laundries, only one hand laundry in the town employing any workers regularly. These were all in good condition, the machinery fenced, and the comfort of the workers well attended to. The application of the Factory Act would make little difference, and the managers were all favourable to it, while admitting that some overtime was usually worked in the busy season, which is, however, a short one.

The only complaint received from the workers was with regard to working after 2 p.m. on Saturday, which is considered a hardship.

In Dundee and Perth the laundries were neither so clean nor so airy as in Aberdeen, and there was more opposition to the Factory Act expressed among the workers here than I met with anywhere else. I was struck with the pale unhealthy look of many of the workers, but I think the want of ventilation would often account for that.

Proprietor No. 27 expressed herself quite in favour of the Factory Act, which would not affect her hours. Said she would be glad to have them still further reduced by law.

Manager No. 30 said the difficulty was to get competent workers, and the Factory Act would hamper the work very much.

Clerk in No. 31 said she thought the hours too long, but did not see how they could be improved without lowering wages. This laundry, in addition to the regular work sent in by the collecting van, has an average of 300 customers who call for their "wash" on Saturday. This makes it 7 o'clock before the laundry can be closed, and she thinks it would be very difficult to change that.

Aberdeen, Dundee, Perth.

No.	Number Employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	——
27	6 ironers ; 8 washers -	7.30–6	7.30–6	7.30–6	7.30–6	7.30–7	7.30–11	12–1	54	Eight at least - -	Proprietor stated that the work often began at 6 a.m. in busy season, and occasionally continued until 8 p.m. No machinery was used, and the rooms were large but badly ventilated, and very hot.
28	11 in all - -	8–6	8–6	8–6	8–6	8–8	8–1	1–2	52	Week in summer -	This laundry was very crowded. The ventilation was bad and no part of the ironing room cooler than 84°.
29	14 ironers ; 5 washers	7–7	7–7	7–7	7–7	7–8.30	7–2	9–10 & 2–3	57½	Week in summer -	The only machinery here was a gas engine, which was not fenced at all. The heat was excessive and the ventilation poor.
30	14 in all - -	7–6	7–6	7–6	7–6	7–8	7–3	12–1	60	10 days at least -	Proprietor stated that work was never continued later than 9 p.m. at any time and than 6 p.m. on Saturday.
31	43 in all - -	8–6	8–6	8–6	8–8	8–9	8–3	1–2	57	Five days - -	This steam laundry was well ventilated; the machinery and the hours seldom exceed the number given.
32	7 in all - -	—	2–7	7–7	7–7	7–9	7–7	1–2	50	One at least - -	The hours worked in this laundry vary very much from week to week, but the manager stated that they are always under 60.

No.	Number Employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	——
33	35 in all - -	—	—	—	—	—	—	1–2	—	Six at least - -	The proprietor here could not give me the hours per day, but said the hours per week for the five weeks previous to my visit were 68, 69, 68, 64, 63. In winter and spring 52 is about the average.
34	40 in all - -	8–6	8–6	8–6	8–6	8–6	8–4.30	1–1.30	55½	Six days - -	All was in good order in this laundry (steam).
35	55 in all - -	7–6	7–6	7–6	7–6	7–6	7–1	1–1.45	57	Six at least - -	Only a few workers here are employed six days in the week, but the Saturday half-holiday is often not given.
36	110 in all - -	7–6	7–6	7–6	7–6	7–6	7–1.30	9–9.30. 1–1.30.	56	Six at least - -	In the busy season the working hours are often from 6 until 7.

Edinburgh.

The shop laundries so common in Glasgow are quite unknown here, and many of the hand laundries are in the area flats of private houses. Most of these are deficient in ventilation and cleanliness. The want of employment for the ironers in the beginning of the week is the chief difficulty in regulating the work, but the irregularity of the women in coming to their work is often given as a reason for the long hours. Good workers seem to be scarce, and to change their places of employment very often. Several laundries keep workers living on the premises, so that they may be able to depend on them. The busy season is in winter and spring, and many of the laundries when I visited them had only about half the winter number of women at work. On visiting late on Thursday and Friday I found very little work going on, and, judging by the information given and by the complaints made by the workers, I think very late work, such as is common in Glasgow, is exceptional here. Few holidays (in some cases none) are given, and have always to be made up for. The general feeling, while in favour of some limitation of the hours of work, was opposed, I think, to the Factory Act. In the hand laundries there were some cases of overcrowding, but I saw nothing of the kind in the large places; but ventilation was often much neglected, and where gas irons were used the smell was often very unpleasant.

I made inquiries at a number of the hotels with regard to the washing of visitors' and house linen, and found that out of 10 hotels six sent everything out, four sent out part of the work and did part in the hotel. The proprietors of small laudries had, many of them, tried to regulate the work better, but found it impossible, and seemed to think it would hamper the trade unnecessarily to impose restrictions.

Proprietor No. 38, doing a large hotel and shipping trade, thinks it would make it necessary for hotels and ships to have double supplies of linen, as that work has often to be done at night.

Manager No. 46 stated that she thought inspection was much required on sanitary grounds, as the condition of many of the laundries makes the work much harder than it need be.

Proprietor No. 47 thinks it might easily be arranged, as, with a little management, it is possible to have work all week. In spite of this, she employs her workers 62 hours per week, and has only given them two holidays in five years.

Proprietor of a small laundry not given in report said she was in favour of the Factory Act, in the hope that it would bring a more dependable class of women into the laundries. She thought many of the women now employed would not remain at it if they had to come at a stated hour every day.

Manager No. 52 said he was in favour of reducing the hours to 54 if allowed to have different sets of workers beginning at different hours, so that the machinery might be kept going for 15 hours a day. Thought the hours could not be regulated by the day, but should be by the week, with, perhaps, 11½ hours as the maximum number for any one day.

The ironers in No. 41 said they were quite pleased with the hours of work, and that they preferred having Monday off even if they had to work late to make up for it later in the week.

Worker in No. 38 stated that the hours were very trying, and ought to be shortened. She has worked all night occasionally, going home from 7 p.m. until 11 p.m. She thinks it healthy work if not working too long.

I had a number of complaints made to me by workers, but many of these were difficult to verify, and others were regarding matters with which the Factory Act could not interfere.

Edinburgh.

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
37	30 in all - -	8–7	8–7	8–7	8–9	8–9	6–1	1–2	60	No regular days given	The ironers here often do not come in on Monday, the washers on Saturday, but on Friday the work sometimes begins at 6. The machinery was fenced and all in good order.
38	45 in all - -	3–6	7–6.30	7–6.30	7–6.30	7–6.30	7–6.30	9–10 and 2–3	50½	No regular days -	—
39	15 - - -	—	10–7	7–7	7–9	7–9	7–9.30	12–12.45 and 5–5.30	57½	Four at least -	When there is any work in for Monday these hours are, of course, exceeded.
40	7 ironers; 3 washers	—	8–7	8–7	6–9	6–9	6–2	1–2	54½	Six at least - -	Half an hour given for breakfast when work begins at 6.
41	9 in all - -	—	7–7	7–7	7–7	7–7	7–2	—	55	Two days - -	Washers here work on Monday and not on Saturday. There is no regular meal hour at all.
42	3 - - -	10–7	7–7	7–7	7–7	7–7	7–4	12.30–1	63	One day - -	This laundry was in good order, but the working hours very irregular.
43	60 in all - -	1–7	8–7	8–7	8–7	8–7	8–1	12.15–1 4.45–5	51	Four days - -	Manager said the hours very seldom exceeded those given. The machinery was well fenced and all in good order.
44	40 in all - -	6.30–6.30	6.30–6.30	6.30–6.30	6.30–8	6.30–8	6.30–4	9–9.45 2–2.45	64¼	Two days - -	This laundry was dirty and ill-ventilated, and the machinery not fenced.
45	50 - - -	7–7	7–7	7–7	7–8	7–8	7–4	9–9.45 2–3 5–5.15	61½	Do. - -	—

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
46	10 - - -	7–6	7–6	7–6	7–7	7–8	7–6	9–9.30 1–1.30	63	Two days - -	This laundry was in a very insanitary condition, the machinery unfenced, and the women complained of the heat.
47	5 ironers; 4 washers	7–7	7–7	7–7	7–7	6–7	6–7	9–9.45 1–1.45 4–4.30	64	None - - -	——
48	39 - - -	8–7.15	8–7.15	8–8.15	8–8.15	8–8.15	8–1	1–2 4–4.15	59	No regular days -	Very often not in on more than five days.
49	30 - - -	7–6.30	7–6.30	7–6.30	7–8	7–8	7–4	1–2*	63	Two days - -	These hours are the hours in winter. In summer they are a little shorter.
50	7 in all - -	7–7	7–7	7–7	6–7	6–7	6–5	9–10 2–3	62	Four days at least -	The proprietor admitted that longer hours were often worked in winter, as from 6 a.m. to 9 p.m. three times a week.
51	22 in all - -	7–7	7–7	7–7	7–9	7–9	7–4	9–9.30 1–2 5–5.30	62½	No regular days -	This laundry does a great deal of hotel work, and generally has regular hours. Has only been working until 10 p.m. three times this season. Last season sometimes worked all night.
52	113 - - -	2–6	8–9	8–9	8–9	8–9	8–12	1–2 5–5.30	54	No information -	These hours apply to the ironers; the washers are shorter, and it is only about 20 times in a year that the ironers come in on Saturday.
53	50 - - -	6.30–6.30	6.30–6.30	6.30–6.30	6.30–6.30	6.30–6-30	6.30–2	9–9.45 2–2.45	60¾	No regular days -	This laundry was poorly ventilated and dirty.

* Half hour for tea Thursday and Friday; half hour for dinner Saturday.

Newcastle, Sunderland, South Shields.

Many of the laundries in this district were very dirty and badly ventilated. There was much reluctance to let me see them, and I was only admitted to one of the four steam laundries I visited. The hours of work seem to be very irregular, and I found difficulty in getting any information about them more definite than a weekly average. The employers almost all admitted that very late hours were worked at times, and many of them blame the workers for not coming in earlier more than the work, but the difficulty about having work for the beginning of the week is as general here as in Scotland.

Manager of No. 52 thinks there should be some restriction as to hours, but not a daily limit. He has had to keep his workers until 11 p.m. once a fortnight all season on the arrival of a ship. Three times this year he has employed 15 women all Friday night, and until 12 noon on Saturday, and three times four women for the same period.

Manager of a large laundry not in report, stated that he finds the workers more difficult to get than the work early in the week. He said that he allows his workers to remain all night on Friday when they please instead of coming in on Saturday, so that they may be able to enjoy a whole holiday.

Worker in the same laundry stated that she had sometimes worked all night on Friday and on Saturday until dinner time also. Said she thought something should be done, as the work was killing, and they could do with less wage if they had shorter hours.

Proprietors of Nos. 55 and 56 blame the workers, who they said would not come in early in the week, for the irregular hours.

Manager No. 58 said that shipping work kept his laundry working late sometimes, otherwise he found it quite easy, never to be later than 8.30.

Manager No. 61 said she could always keep enough work over at the end of the week to start with on Monday, and had little trouble with the women, who, however, were always anxious to work overtime.

Newcastle, Sunderland, South Shields.

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
52	60 in all	9.30–8	8–6	8–6	8–8.30	8–9	8–12	1–2	60	6 days at least	Sometimes work later on Friday night, and do not work at all on Saturday.
53	3 ironers; 2 washers	7–7	7–7	7–7	7–7	7–9	7–2	12–1	64	No regular holidays	This laundry was in very bad condition, no ventilation at all, and space very limited. The hours given are sometimes exceeded at the end of the week, and occasionally work is continued all night.
54	3 ironers; 2 washers; 2 markers.	—	—	—	—	—	—	1 hour	55	No information	Proprietor here stated that her workers were usually employed 12 hours daily five days a week. Sometimes more on Friday. She would be glad to employ them longer if she had work for them.
55	5 ironers; 3 washers; 2 markers.	—	2–8	8–9	8–9	8–9.30	7–10.30	No regular hour.	61	No information	Workers here have no set hour for dinner, but can do as they like about it. Proprietor stated that workwas occasionally continued all night. Objected to show laundry.
56	5 ironers 2 washers	— 8–8	2–8 8–8	8–8 8–8	8–10 8–8	8–11 8–8	8–6 —	1 hour 1 hour	53 55	2 at least ,,	No regular meal hour here. Work is often continued until 11 on Saturday. Half an hour is allowed for tea, when working late.
57	4 ironers 2 washers	— 8.30–6	9–8 8.30–6	9–10 8.30–10	9–10 8.30–10	9–10 8.30–10	9–7 —	12–1 and 4–4.30.	53 53	6 at least ,,	This laundry was clean, and seemed very well conducted. Never work later than the hours given.

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	Holidays.	—
58	60 in all - -	8–7.30	8–7.30	8–7.30	8–7.30	8–7.30	8–5	10–10.15; 12–1; 4.30–5.	56½	4 at least - -	The workers have not been employed here after 8.30 p.m. this season, but last year worked all night occasionally at shipping work. I did not see this laundry (steam) except the packing-room.
59	100 - - -	8–8	8–8	8–8	8–9	8–10	8–4	12–1; 4.30–5.	62½	No information -	This is a steam laundry to which I was nct admitted. The manager stated that she could not give me reliable hours for Monday and Saturday, as they varied so much, but never exceed those given.
60	28 - -	8–6	8–6	8–6	8–6	8–6	8–6	1 hour -	54	No information -	I was not admitted to this steam lanndry, but received the information given from the proprietor.
61	22 - - -	1–6	6.30–7.30	6.30–7.30	6.30–8	6.30–8	6.30–1	9–9.30; 12–1.	58½	4 at least - -	These hours apply only to the ironers, and are often exceeded, especially on Saturday. Well ventilated, clean laundry.

I have visited 14 charitable institutions, including convents, doing laundry work, and have not found any working more than factory hours per week.

In many of them the matron has told me that if more work could be got she would gladly undertake it, but the want of proficient workers makes it difficult for them to compete with outside workers. The opinions expressed on the subject varied very much, most of the matrons disliking the idea of inspection, but some were in favour of it, one in particular, matron of an institution not in report, saying she thought it would save a great deal of friction if the working hours were more clearly defined. The difficulty of keeping the women and girls in these places occupied when they are not working seems to be a serious one, consequently the working hours are spread over as much of their waking time as possible. I wish to point out also that when there is anything to interrupt the work during the day, frequently a church service which there is no choice about attending, the work is made up later in the day, and the same when there is any holiday or festivity.

I only saw two or three laundries of this class which were not kept clean, but ventilation and the fencing of the machinery were often defective.

Matron No. 62 approved of Factory Act, which she said would make no difference in her hours.

Matron No. 64 also approved, saying that she thought it would be good for the girls and make them work with more energy.

Matron No. 66 thinks institutions should be included. Work is scarce at present, but she had frequently worked until 9 p.m.

Matron No. 67 thinks it impossible to regulate the work in this way. A great deal of hotel work comes to this institution, and often causes late work.

Matron's assistant in No. 68, thinks it quite unnecessary where the hours are so short as in this laundry. Stated that as it was their object to make a home for their girls more than anything else, they always endeavoured to reserve 8 p.m. to 9 p.m. for recreation. Also said that they would gladly undertake more work if it could be got.

Matrons Nos. 71 and 73 objected to inspection, and both stated that scarcity of work was their trouble, and often made it difficult for them to find employment for the inmates of their houses.

I have found that these institutions do a large proportion of the hotel work, and as this is often the cause of late work there is no doubt they would get more of it to do if the Factory Act were applied to the other laundries only.

No.	Number employed.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Meal Hours.	Working Hours per Week.	—
62	30 ironers; 10 washers	7–7	7–7	7–7	7–7	7–7	7–4	2½ hrs.	55	—
63	70 in all	6.30–8	6.30–8	6.30–8	6.30–8	6.30–8	6.30–12	2½ hrs.	59½	—
64	35 in all	7–7	7–7	7–7	7–7	7–7	7–2	2½ hrs.	53½	—
65	6 in all	7–8	7–8	7–8	7–8	7–8	7–4	2½ hrs.	60	—
66	15 in all	—	—	—	—	—	—	—	—	No regular hours given, as work is very scarce.
67	18 in all	6–10	6–8	9–6	9–6	9–12	12–5	9–10 & 2–3	50	This laundry was very hot, and badly ventilated.
68	20 in all	6.30–7.30	6.30–7.30	6 30–7.30	6.30–7.30	6.30–7.30	6.30–2	3 hrs. off	56½	The heat was excessive in this laundry.
69	70 in all	8–7	8–7	8–7	8–7	8–7	—	12–1 & 4.30–5	47½	This steam laundry does hotel work principally, and seldom has work for the ironers on Saturday, which is occupied in house work, scrubbing, &c.
70	70 in all	7–7	7–7	7–7	7–7	7–7	7–7	2½ hrs.	57	24 of the workers in this laundry are outsiders employed here. All time allowed off has to be made up for, and work is sometimes continued pretty late.
71	10 in all	8–7	8–7	8–7	8–7	8–7	8–7	1½ hrs.	57	Often work shorter hours on Saturday. About twice have a special shipping order, and may work until 11 p.m.
72	25 in all	6–6	6–6	6–6	6–6	6–6	6–6	2½ hrs.	57	—
73	60 in all	8–6.15	8–6.15	8–6.15	8–6.15	8–6.15	8–6.15	2¼ hrs.	48½	In good order. Seldom work later, but would be glad to begin earlier if there was more work.

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